



Ingenious Portfolio

Our rich history and extensive industry knowledge have resulted in a comprehensive line of high-performance laboratory equipment that continually meet our customers' needs at economical and cost-effective prices.

Look inside for NEW 2020 product and pricing information!



Stay Connected

www.ohaus.com

Don't hesitate to try out our www.ohaus.com. We added some extra features that will help you get the information you need at one click.



Dealer Zone

If you are looking for marketing materials visit new Dealer Zone to get pictures, videos, brochures, presentations, latest news and more!

Let us keep you in the loop!



Follow **OHAUS** on **YouTube**, **LinkedIn** and **Facebook** to learn about our latest products, promotions and success stories with customers around the globe.



Still hungry for news? Visit our blog **OHAUS World** and **LabTube** channel.



www.ohausworld.com



www.labtube.tv/channel/ohauscorporation



Discover our ingenious portfolio

1 ***Guardian 7000 Hotplate Stirrer***

OHAUS Guardian 7000 Hotplate Stirrers are designed with outstanding safety features and superior performance for every application.

▶ See page 64

3 ***Incubating Cooling Thermal Shaker***

Industry Leading Thermal Shaker with Exceptional Heating Cooling Performance with High Speed Shaking.

▶ See page 20

2 ***Frontier 5000 Series Micro centrifuge***

Dependable Benchtop Micro Centrifuges Ideal for High-Speed Lab Applications.

▶ See page 75

| | |
|--|--|
| Open Air Shakers | 10 Light Duty Orbital Shakers |
| | 11 Heavy Duty Orbital Shaker |
| | 13 Extreme Environment Shakers |
| | 14 Reciprocating Shaker |
| | 15 Rocking-Waving Shakers |
| Incubating & Incubating Cooling Shakers | 20 Incubating Cooling Thermal Shakers |
| | 22 Incubating Light Duty Orbital Shakers |
| | 23 Incubating Cooling Orbital Shakers |
| | 26 Incubating Rocking & Waving Shakers |
| Vortex Mixers | 40 Mini Vortex Mixers |
| | 43 Heavy-Duty Vortex Mixers |
| | 44 Microplate Vortex Mixers |
| | 46 Multi-Tube Vortex Mixers |
| Dry Block Heaters | 52 1 Block Dry Block Heaters |
| | 53 2 Block Dry Block Heaters |
| | 54 4 Block Dry Block Heaters |
| | 55 6 Block Dry Block Heaters |
| Hotplates & Stirrers | 64 Guardian 7000 |
| | 66 Guardian 5000 |
| | 68 Mini Hotplates & Stirrers |
| Bead Mill Homogenizers | 70 Bead Mill Homogenizers |
| Centrifuges | 72 Frontier 5000 Series Multi Pro |
| | 75 Frontier 5000 Series Micro |
| | 76 Frontier 5000 Series Multi |
| | 77 Frontier 5000 Series Mini |
| Meters, Electrodes & Solutions | 79 Starter 5000 pH Bench |
| | 80 Starter 3100 pH Bench |
| | 81 Starter 3100C Conductivity Bench |
| | 82 Starter 3100M pH and Conductivity Bench |
| | 84 Starter 2100 pH Bench |
| | 85 Starter 300 pH Portable |
| | 86 Starter 400 pH Portable |
| | 87 Starter 300C Conductivity Portable |
| | 88 Starter 400D DO Portable |
| | 89 Starter 400M Multi-Parameter Portable |
| | 90 Starter 300D DO Portable |
| | 91 Starter Pen Meters |
| | 92 Starter Electrodes and Sensors |
| | 93 Across™ Pro Pipette |
| LabJaws Clamps & Supports | 95 Multi-Purpose Clamps |
| | 108 Rods, Frames, Lifts & Supports |

What is in a Model Number?

Open Air Shakers



| SHHD1619DG = Heavy Duty Open Air Shaker with 16 kg capacity, 19 mm orbit and digital controls | | | | | |
|---|--|---|--|-----------------------------|----------------|
| SH | LD | MP | 03 | DG | |
| Type | Family | Capacity | Orbit* | Front Panel Control | Tiers** |
| SH = Open Air Shakers | LD = Light Duty*** EX = Extreme Environment HD = Heavy Duty**** RK = Rocking WV = Waving RC = Reciprocating | 02 = 2 kg 04 = 4 kg 07 = 7 kg 16 = 16 kg 23 = 23 kg 45 = 45 kg 68 = 68 kg MP = Microplates | Orbit (mm): 03 = 3 mm 15 = 15 mm 19 = 19 mm 25 = 25 mm 50 = 50 mm | AL = Analog DG = Digital | 1 = 1 2 = 2 |
| *Not applicable to RK and WV families **Analog Rockers Only | | ***LD models can handle samples up to 3,6 kg or 4 microplates or 2 micro-tube racks ****HD models can handle heavier samples and are available from 16 up to 68 kg | | | |

Incubating & Incubating Cooling Shakers



| ISTHBLHTS = Incubating Cooling Thermal Shaker with block, heats only and touch screen controls | | | | | |
|--|---|---|--|-----------------------------------|-----------------------------|
| IS | LD | 04 | H | DG | |
| Type | Family | Capacity | Temperature Control | Front Panel Control | Opaque Lid Only |
| IS = Incubating Shakers | IC = Incubating/Cooling TH = Thermal Shakers HD = Heavy Duty** LD = Light Duty* RK = Rocking WV = Waving | 02 = 2 kg 04 = 4 kg 16 = 16 kg 23 = 23 kg BL = Thermal Shaker Blocks MP = Microplate or Modular Blocks MP = Microplates | C = Heats & Cools H = Heat Only | DG = Digital TS = Touch Screen | L = Light Sensitive Samples |
| | | | *LD models can handle samples up to 3,6 kg or 4 microplates or 2 micro-tube racks **HD models can handle heavier samples and are available from 16 kg up to 23 kg | | |

Vortex Mixers



| VXMNAL = Mini Vortex Mixer with analog control | | | |
|--|--|---|---|
| VX | MN | AL | |
| Type | Family | Front Panel Control | |
| VX = Vortex Mixer | MN = Mini* HD = Heavy Duty** MP = Microplate MT = Multitube | AL = Analog DG = Digital FS = Fixed Speed PS = Pulsing | *Mini models have an intermittent duty rating for short term mixing and are limited to speeds below ~900 rpm when used with optional accessories **HD models have a continuous duty rating for mixing samples when used with optional accessories throughout the entire speed range for extended periods of time |

Dry Block Heaters



| HB1AL = 1 Block Heater with analog controls | | | |
|---|--|-----------------------------|--|
| HB | 1 | AL | |
| Type | Family | Front Panel Control | Units with Lids Only |
| HB = Heatblocks | 1 = 1 Block Well 2 = 2 Block Well 4 = 4 Block Well 6 = 6 Block Well | AL = Analog DG = Digital | HL = Heated Lid version LD = Lid (non-heated) |

Hotplates & Stirrers



| HSMNHS4CAL = Mini Hotplate Stirrer with 10 x 10 cm ceramic plate and analog controls | | | | | |
|--|-----------|---|-------------------------------|--------------------|---------------------------------------|
| HS | MN | HS | 4 | C | AL |
| Type | Family | Function | Top Plate Size | Top Plate Material | Front Panel Control |
| HS = Hotplate Stirrer | MN = Mini | AS = Auto Stirrer HP = Hotplate HS = Hotplate Stirrer ST = Stirrer | 4= 10 x 10 cm / 4 x 4 inch | C = Ceramic | AL = Analog FT = Fixed Temperature |

Open Air Shakers



*Light Duty Orbital Shakers
Heavy Duty Orbital Shakers
Extreme Environment Shakers
Reciprocating Shakers
Rocking & Waving Shakers*

Open Air Shakers Selection Guide



| Product Family | Light Duty Orbital Shaker | Light Duty Orbital Shaker | Light Duty Orbital Shaker | Light Duty Orbital Shaker |
|---------------------------------|---------------------------|---------------------------|---------------------------|---------------------------------------|
| Model | SHLD0415AL | SHLD0403DG | SHLD0415DG | SHLDMP03DG |
| Speed Range | 40 to 300 rpm | 100 to 1200 rpm | 40 to 300 rpm | 100 to 1200 rpm |
| Timer | N/A | 1 second to 160 hours | 1 second to 160 hours | 1 second to 160 hours |
| Motion | Orbital | Orbital | Orbital | Orbital |
| Orbit | 15 mm | 3 mm | 15 mm | 3 mm |
| Max Weight Capacity | 3,6 kg | 3,6 kg | 3,6 kg | 4 microplates / 2 micro-tube racks |
| Audible Alarm | — | ● | ● | ● |
| Load Sensor | — | — | — | — |
| Motor Type | Brushless DC Motor | Brushless DC Motor | Brushless DC Motor | Brushless DC Motor |
| CO ₂ Environment | ● | ● | ● | ● |
| Overload Protection | — | ● | ● | ● |
| User Calibration (Speed) | — | — | — | — |
| RS232 Interface | — | — | — | — |
| Included Tray (L x W) | 29,9 x 22,2 cm | 29,9 x 22,2 cm | 29,9 x 22,2 cm | 27,9 x 19,7 cm |
| Tray / Platform Options (L x W) | N/A | Adjustable Platform | Adjustable Platform | N/A |



| Product Family | Heavy Duty Shaker | Heavy Duty Shaker | Heavy Duty Shaker | Heavy Duty Orbital Shaker |
|---------------------------------|--|--|--|--|
| Model | SHHD1619AL | SHHD1619DG | SHHD2325AL | SHHD2325DG |
| Speed Range | 25 to 500 rpm | 15 to 500 rpm | 25 to 500 rpm | 20 to 500 rpm |
| Timer | 1 to 120 minutes | 1 second to 160 hours | 1 to 120 minutes | 1 second to 160 hours |
| Motion | Orbital | Orbital | Orbital | Orbital |
| Orbit | 19 mm | 19 mm | 25 mm | 25 mm |
| Max Weight Capacity | 16 kg | 16 kg | 22,7 kg | 22,7 kg |
| Audible Alarm | — | ● | — | ● |
| Load Sensor | — | ● | — | ● |
| Motor Type | Brushless DC Motor | Brushless DC Motor | Brushless DC Motor | Brushless DC Motor |
| CO ₂ Environment | ● | ● | ● | ● |
| Overload Protection | — | ● | — | ● |
| User Calibration (Speed) | — | ● | — | ● |
| RS232 Interface | — | ● | — | ● |
| Included Tray (L x W) | 27,9 x 33 cm | 27,9 x 33 cm | 45,7 x 61 cm | 45,7 x 61 cm |
| Tray / Platform Options (L x W) | 27,9 x 33 cm, 33 x 33 cm, 45,7 x 45,7 cm, 45,7 x 61 cm Adjustable Platform Separatory Funnel Platform | 27,9 x 33 cm, 33 x 33 cm, 45,7 x 45,7 cm, 45,7 x 61 cm Adjustable Platform Separatory Funnel Platform | 45,7 x 61 cm, 45,7 x 76,2 cm Adjustable Platform Large Vessel Carrier Platform | 45,7 x 61 cm, 45,7 x 76,2 cm Adjustable Platform Large Vessel Carrier Platform |

● Yes

Open Air Shakers Selection Guide



| Product Family | Heavy Duty Orbital Shaker | Heavy Duty Orbital Shaker | Heavy Duty Orbital Shaker | Heavy Duty Orbital Shaker | Extreme Environment Shaker |
|---------------------------------|--|--|--|--|--|
| Model | SHHD4525DG | SHHD4550DG | SHHD6825DG | SHHD6850DG | SHEX1619DG |
| Speed Range | 15 to 500 rpm | 15 to 300 rpm | 15 to 500 rpm | 15 to 300 rpm | 15 to 500 rpm |
| Timer | 1 second to 160 hours | 1 second to 160 hours | 1 second to 160 hours | 1 second to 160 hours | 1 second to 160 hours |
| Motion | Orbital | Orbital | Orbital | Orbital | Orbital |
| Orbit | 25 mm | 51 mm | 25 mm | 51 mm | 19 mm |
| Max Weight Capacity | 45,4 kg | 45,4 kg | 68 kg | 68 kg | 16 kg |
| Audible Alarm | ● | ● | ● | ● | ● |
| Load Sensor | ● | ● | ● | ● | ● |
| Motor Type | Brushless DC Motor | Brushless DC Motor | Brushless DC Motor | Brushless DC Motor | Brushless DC Motor |
| CO ₂ Environment | ● | ● | ● | ● | ● |
| Overload Protection | ● | ● | ● | ● | ● |
| User Calibration (Speed) | ● | ● | ● | ● | ● |
| RS232 Interface | ● | ● | ● | ● | ● |
| Included Tray (L x W) | 61 x 61 cm | 61 x 61 cm | 61 x 91 cm | 61 x 91 cm | 27,9 x 33 cm |
| Tray / Platform Options (L x W) | 61 x 61 cm Large Vessel Carrier Platform | 61 x 61 cm Large Vessel Carrier Platform | 61 x 91 cm Large Vessel Carrier Platform | 61 x 91 cm Large Vessel Carrier Platform | 27,9 x 33 cm, 33 x 33 cm, 45,7 x 45,7 cm, 45,7 x 61 cm Adjustable Platform Separatory Funnel Platform |



| Product Family | Reciprocating Shaker | Rocking Shaker | Rocking Shaker | Rocking Shaker | Waving Shaker | Waving Shaker |
|---------------------------------|---|-----------------------|-------------------------|-------------------------|-----------------------|-------------------------|
| Model | SHRC0719DG | SHRK04DG | SHRK07AL1 | SHRK07AL2 | SHWV02DG | SHWV02AL |
| Speed Range | 20 to 300 rpm | 1 to 50 rpm* | 1 to 75 rpm* | 1 to 75 rpm* | 1 to 30 rpm* | 1 to 75 rpm* |
| Timer | 1 second to 160 hours | 1 second to 160 hours | 1 minute to 120 minutes | 1 minute to 120 minutes | 1 second to 160 hours | 1 minute to 120 minutes |
| Motion | Reciprocating | Rocking | Rocking | Rocking | Waving | Waving |
| Orbit | Stroke: 19 mm | Tilt Angle: 0 to 15° | Tilt Angle: 0 to 15° | Tilt Angle: 0 to 15° | Tilt Angle: 0 to 20°* | Tilt Angle: 0 to 16° |
| Max Weight Capacity | 6,8 kg | 4,5 kg** | 7,3 kg** | 7,3 kg** | 2,3 kg** | 2,3 kg** |
| Audible Alarm | ● | ● | — | — | ● | — |
| Load Sensor | ● | — | — | — | — | — |
| Motor Type | Brushless DC Motor | Stepper Motor | Stepper Motor | Stepper Motor | Stepper Motor | Stepper Motor |
| CO ₂ Environment | ● | ● | — | — | ● | — |
| Overload Protection | ● | ● | — | — | ● | — |
| User Calibration (Speed) | ● | — | — | — | — | — |
| RS232 Interface | ● | — | — | — | — | — |
| Included Tray (L x W) | 27,9 x 33 cm | 32,4 x 25,4 cm | 35,6 x 27,9 cm | 35,6 x 27,9 cm | 29,9 x 22,2 cm | 35,6 x 27,9 cm |
| Tray / Platform Options (L x W) | 27,9 x 33 cm, 33 x 33 cm, 45,7 x 45,7 cm, 45,7 x 61 cm Separatory Funnel Platform | Stacking Tray | Stacking Tray | Stacking Tray | Stacking Tray | — |

● Yes

* Maximum speed/tilt angle may vary with heavy or unbalanced loads. ** Centered on tray.

Light Duty Orbital Shakers

Choose the Perfect Light Duty Orbital Shaker You Can Trust for Reliable Everyday Shaking

- Designed for flexibility with your applications – OHAUS Light Duty Shakers include the ready-to-use tray and mat, or remove the mat and customize the tray with over 20 easy-to-install accessories.
- Well-performing economical choice for your everyday laboratory shaking needs. Non-digital model offers reliable shaking across the entire speed range with the robust triple eccentric drive design.
- Microplate shaker is designed to securely hold up to four microplates or deepwell plates, or easily install two microtube racks. Units slowly increase speed to desired setpoint to avoid splashing.



| | |
|------------------------|---|
| Application | ELISA Assays, Cell Cultures, Immunoassays, Protein Studies, Bacterial and Yeast Cultures, Staining/Destaining, Blotting Techniques, DNA Studies |
| Display | Easy-to-read, independent LED displays for speed/time allow the operator to view all settings simultaneously (digital models) and basic control knobs with dial markings for speed/time (analog models) |
| Operation | Detachable 3-wire cord and plug (included) |
| Construction | Cast aluminium |
| Design Features | Non-slip mat (29,9 × 22,2 cm) included with all models except the Microplate Shaker |

| Model | Description | Item N° |
|--------------------------------|----------------------------------|----------|
| SHLD0415AL | Analog Light Duty Orbital Shaker | 30391893 |
| Specifications | | |
| Speed Range | 40 to 300 rpm | |
| Orbit | 15 mm | |
| Maximum Weight Capacity | 3,6 kg | |
| Tray Material | Aluminium | |
| Tray Dimensions (L × W) | 29,9 × 22,2 cm | |
| Overall Dimensions (L × W × H) | 41,3 × 25,4 × 10,2 cm | |
| Ship Weight | 11,3 kg | |

| Model | Description | Item N° |
|--------------------------------|-------------------------------------|----------|
| SHLDMP03DG | Light Duty Microplate Shaker | 30391907 |
| Specifications | | |
| Speed Range | 100 to 1200 rpm | |
| Speed Accuracy | ± 2% | |
| Timer | 1 second to 160 hours | |
| Orbit | 3 mm | |
| Maximum Weight Capacity | 4 microplates or 2 micro-tube racks | |
| Tray Material | Aluminium | |
| Tray Dimensions (L × W) | 27,9 × 19,7 cm | |
| Overall Dimensions (L × W × H) | 41,3 × 25,4 × 10,2 cm | |
| Ship Weight | 11,3 kg | |

| Model | Description | Item N° |
|--------------------------------|--|----------|
| SHLD0403DG | Digital Light Duty Orbital Shaker 3 mm Orbit | 30391900 |
| SHLD0415DG | Digital Light Duty Orbital Shaker 15 mm Orbit | 30391914 |
| Specifications | | |
| Speed Range | SHLD0403DG 100 to 1200 rpm SHLD0415DG 40 to 300 rpm | |
| Speed Accuracy | +/-2% above 100 rpm +/-2 rpm below 100 rpm | |
| Timer | 1 second to 160 hours | |
| Orbit | SHLD0403DG 3 mm SHLD0415DG 15 mm | |
| Maximum Weight Capacity | 3,6 kg | |
| Tray Material | Aluminium | |
| Tray Dimensions (L × W) | 29,9 × 22,2 cm | |
| Overall Dimensions (L × W × H) | 41,3 × 25,4 × 10,2 cm | |
| Ship Weight | 11,3 kg | |

Heavy Duty Orbital Shakers

Eight Orbital Shakers Offering a Variety of Capacities and Flexibility to Maximize Sample Processing

- Ready for your lab - all models include a tray and rubber mat and can be customized with over 70 accessory options.
- Rely on the digital shakers' exclusive Accu-Drive shaking system for exceptional speed control, accuracy and durability. All models feature a maintenance-free motor for long-term use.
- Protect your samples. Optimal speed ramping feature slowly increases speed to setpoint to avoid splashing. The load sensor detects unbalanced conditions and automatically reduces to a safe speed.



| | |
|------------------------|--|
| Application | Cell Cultures, Solubility Studies, Extractions, Bacteria & Yeast Cultures and Suspensions, Staining/Destaining, Immunoassays, Protein Studies, Blotting Techniques |
| Display | Independent LED displays for speed/time allow the operator to view both settings simultaneously and control knobs with dial markings (analog models) |
| Operation | Detachable 3-wire cord and plug (included) |
| Communication | RS232 interface provides two-way communication for data logging and unit control (digital models) |
| Construction | Cold rolled steel (CRS) |
| Design Features | Built-in tray (28 x 33 cm) with a non-slip rubber mat (included) |

| Model | Description | Item N° |
|--------------------------------|---|----------|
| SHHD1619AL | 16 kg Capacity Analog Heavy Duty Orbital Shaker | 30391802 |
| Specifications | | |
| Speed Range | 25 to 500 rpm | |
| Timer | 1 minute to 120 minutes | |
| Orbit | 19 mm | |
| Maximum Weight Capacity | 16 kg | |
| Tray Material | Aluminium | |
| Tray Dimensions (L x W) | 27,9 x 33 cm | |
| Overall Dimensions (L x W x H) | 41,3 x 35,5 x 14,9 cm | |
| Ship Weight | 22,2 kg | |

| Model | Description | Item N° |
|--------------------------------|---|----------|
| SHHD2325AL | 23 kg Capacity Analog Heavy Duty Orbital Shaker | 30391837 |
| Specifications | | |
| Speed Range | 25 to 500 rpm | |
| Timer | 1 minute to 120 minutes | |
| Orbit | 25 mm | |
| Maximum Weight Capacity | 22,7 kg | |
| Tray Material | Aluminium | |
| Tray Dimensions | 45,7 x 61 cm | |
| Overall Dimensions (L x W x H) | 61,0 x 67,8 x 14,9 cm | |
| Ship Weight | 49,5 kg | |

| Model | Description | Item N° |
|--------------------------------|--|----------|
| SHHD1619DG | 16 kg Capacity Digital Heavy Duty Orbital Shaker | 30391811 |
| Specifications | | |
| Speed Range | 15 to 500 rpm | |
| Speed Accuracy | above 100 rpm ± 1% of set speed below 100 rpm ± 1 rpm | |
| Timer | 1 second to 160 hours | |
| Orbit | 19 mm orbit | |
| Maximum Weight Capacity | 16 kg | |
| Tray Material | Aluminium | |
| Tray Dimensions (L x W) | 27,9 x 33 cm | |
| Overall Dimensions (L x W x H) | 41,3 x 35,5 x 14,9 cm | |
| Ship Weight | 22,2 kg | |

Heavy Duty Orbital Shakers

| Model | Description | Item N° |
|--|--|----------|
| SHHD2325DG | 23 kg Capacity Digital Heavy Duty Orbital Shaker | 30391844 |
| Specifications | | |
| Speed Range | 20 to 500 rpm | |
| Speed Accuracy | above 100 rpm \pm 1% of set speed below 100 rpm \pm 1 rpm | |
| Timer | 1 second to 160 hours | |
| Orbit | 25 mm | |
| Maximum Weight Capacity | 22,7 kg | |
| Tray Material | Aluminium | |
| Tray Dimensions | 45,7 \times 61 cm | |
| Overall Dimensions (L \times W \times H) | 61,0 \times 67,8 \times 14,9 cm | |
| Ship Weight | 49,5 kg | |

| Model | Description | Item N° |
|--|--|----------|
| SHHD6825DG | 68 kg Capacity Digital Heavy Duty Orbital Shaker 25 mm Orbit | 30391879 |
| SHHD6850DG | 68 kg Capacity Digital Heavy Duty Orbital Shaker 51 mm Orbit | 30391886 |
| Specifications | | |
| Speed Range | SHHD6825DG 15 to 500 rpm SHHD6850DG 15 to 300 rpm | |
| Speed Accuracy | above 100 rpm \pm 1% of set speed below 100 rpm \pm 1 rpm | |
| Timer | 1 second to 160 hours | |
| Orbit | SHHD6825DG 25 mm SHHD6850DG 51 mm | |
| Maximum Weight Capacity | 68 kg | |
| Tray Material | Aluminium | |
| Tray Dimensions (L \times W) | 61 \times 91 cm | |
| Overall Dimensions (L \times W \times H) | 74,4 \times 91,4 \times 17,0 cm | |
| Ship Weight | 104,4 kg | |

| Model | Description | Item N° |
|--|--|----------|
| SHHD4525DG | 45 kg Capacity Digital Heavy Duty Orbital Shaker 25 mm Orbit | 30391865 |
| SHHD4550DG | 45 kg Capacity Digital Heavy Duty Orbital Shaker 51 mm Orbit | 30391872 |
| Specifications | | |
| Speed Range | SHHD4525DG 15 to 500 rpm SHHD4550DG 15 to 300 rpm | |
| Speed Accuracy | above 100 rpm \pm 1% of set speed below 100 rpm \pm 1 rpm | |
| Timer | 1 second to 160 hours | |
| Orbit | SHHD4525DG 25 mm SHHD4550DG 51 mm | |
| Maximum Weight Capacity | 45,4 kg | |
| Tray Material | Aluminium | |
| Tray Dimensions (L \times W) | 61 \times 61 cm | |
| Overall Dimensions (L \times W \times H) | 72,9 \times 67,8 \times 17,0 cm | |
| Ship Weight | 90,8 kg | |

Extreme Environment Shakers

High Performance Orbital Shaker Designed to Withstand Extreme Environments Up To 100% Humidity

- Defy the elements - rely on this orbital shaker's unique construction to deliver exceptional speed control, accuracy and durability under the most extreme environmental conditions.
- Best in class load capacity to maximize efficiency in your incubator. Customize the Extreme Environment Shaker for your unique application with over 50 accessories.
- For repeatable results, the exclusive Accu-Drive shaking system ensures speed accuracy. The triple eccentric drive provides smooth, stable shaking motion throughout the entire speed range.



| | |
|------------------------|--|
| Application | Cell Cultures, Solubility Studies, Extraction Procedures, Bacteria & Yeast Cultures and Suspensions, Staining/Destaining, Immunoassays, Protein Studies, Blotting Techniques |
| Display | Independent LED displays for speed/time allow the operator to view both settings simultaneously |
| Operation | Detachable 3-wire cord and plug (included) |
| Communication | RS232 interface provides two-way communication for data logging and unit control (digital models) |
| Construction | Cold rolled steel (CRS) and stainless steel, external control module, thin ribbon cable (1,7 m) easily passes underneath an incubator door or via incubator's utility port |
| Design Features | Built-in tray (28x33 cm) with a non-slip rubber mat (included) |

| Model | Description | Item N° |
|--------------------------------|--|-----------------------|
| SHEX1619DG | Extreme Environment Shaker | 30391816 |
| Specifications | | |
| Speed Range | 15 to 500 rpm | |
| Speed Accuracy | above 100 rpm \pm 1% of set speed below 100 rpm \pm 1 rpm | |
| Timer | 1 second to 160 hours | |
| Orbit | 19 mm | |
| Maximum Weight Capacity | 16 kg | |
| Tray Material | Aluminium | |
| Tray Dimensions (L x W) | 27,9 x 33 cm | |
| Overall Dimensions (L x W x H) | Shaker | 29,4 x 35,5 x 14,9 cm |
| | Remote | 15,0 x 35,6 x 11,2 cm |
| Ship Weight | 22,2 kg | |

Reciprocating Shaker

Providing Consistent, Repeatable Reciprocating Shaking Action for a Variety of Applications

- A flexible unit for the lab - our multi-purpose Reciprocating Shakers can be customized to fit your unique workflow needs using a wide variety of accessories.
- Reciprocating motion is ideal for gentle-to-vigorous mixing of separatory funnels with the sturdy separatory funnel platform. Other optional platforms for flask clamps, media bottles and tube racks.
- Designed for safety - speed ramping feature slowly increases speed to avoid splashing. Load sensor detects unbalanced conditions and automatically reduces to a safe speed to protect samples.



| | |
|------------------------|---|
| Application | Chemical Extractions, Blood Sample Mixing, Gel Staining, Cell Cultures, Solubility Studies |
| Display | Independent LED displays for speed/time allow the operator to view both settings simultaneously |
| Operation | Detachable 3-wire cord and plug (included) |
| Communication | RS232 interface provides two-way communication for data logging and unit control (digital models) |
| Construction | Cold rolled steel (CRS) |
| Design Features | Built-in tray (28x33 cm) with a non-slip rubber mat (included) |

| Model | Description | Item N° |
|--------------------------------|--|----------|
| SHRC0719DG | Digital Reciprocating Shaker | 30391830 |
| Specifications | | |
| Speed Range | 20 to 300 rpm | |
| Speed Accuracy | above 100 rpm \pm 1% of set speed below 100 rpm \pm 1 rpm | |
| Timer | 1 second to 160 hours | |
| Stroke | 19 mm | |
| Maximum Weight Capacity | 6,8 kg | |
| Tray Material | Aluminium | |
| Tray Dimensions (L x W) | 27,9 x 33 cm | |
| Overall Dimensions (L x W x H) | 41,3 x 35,5 x 14,6 cm | |
| Ship Weight | 22,2 kg | |

Rocking-Waving Shakers

Reliable Rocking and Waving Shakers with Simple Adjustments for Tilt Angle and Speed

- Electronic control allows simple tilt angle and speed adjustments while the unit is still running to achieve optimal mixing
- Achieve reproducible results you can trust with digital models. Precisely adjust the tilt angle in 1° increments with variable speed down to 1 rpm with intuitive touchpad controls.
- Optimal speed ramping feature slowly increases speed to desired setpoint to avoid splashing. Smooth rocking or waving motion is maintained with state-of-the-art motor and electronics.



| | |
|------------------------|---|
| Application | Mixing Blood Samples, DNA Extractions, Blotting Techniques, Staining and Destaining Gels, Hybridizations |
| Display | Easy-to-read, independent LED displays for speed, tilt angle and time allow the operator to view all settings simultaneously (digital models) and basic control knobs with dial markings for speed, tilt angle and time (analog models) |
| Operation | Detachable 3-wire cord and plug (included) |
| Construction | Cast aluminium housing, non-slip rubber mat (included), stacking tray option (with all models except the analog Waver model) |
| Design Features | Spill-resistant design, overload protection with audio/visual alarm on digital models and audible alarm on analog models |

| Model | Description | Item N° |
|--------------------------------|---------------------------------|-----------------------|
| SHRK07AL1 | Analog Rocking Shaker 1 Tier | 30391954 |
| SHRK07AL2 | Analog Rocking Shaker 2 Tier | 30391961 |
| Specifications | | |
| Speed Range | 1 to 75 rpm* | |
| Tilt Angle | 0 to 15°* | |
| Timer | 1 minute to 120 minutes | |
| Maximum Weight Capacity | 7,3 kg** | |
| Tray Material | Aluminium | |
| Tray Dimensions (L x W) | 35,6 x 27,9 cm | |
| Overall Dimensions (L x W x H) | 1 Tier | 42,5 x 27,9 x 14,0 cm |
| | 2 Tier | 42,5 x 27,9 x 24,1 cm |
| Ship Weight | 7 kg | |

| Model | Description | Item N° |
|--------------------------------|-------------------------|----------|
| SHWV02AL | Analog Waving Shaker | 30391968 |
| Specifications | | |
| Speed Range | 1 to 75 rpm* | |
| Tilt Angle | 0 to 16°* | |
| Timer | 1 minute to 120 minutes | |
| Maximum Weight Capacity | 2,3 kg** | |
| Tray Material | Aluminium | |
| Tray Dimensions (L x W) | 35,6 x 27,9 cm | |
| Overall Dimensions (L x W x H) | 42,5 x 27,9 x 16,5 cm | |
| Ship Weight | 7 kg | |

| Model | Description | Item N° |
|--------------------------------|----------------------------------|----------|
| SHRK04DG | Digital Rocking Shaker 1 Tier | 30391989 |
| Specifications | | |
| Speed Range | 1 to 50 rpm* | |
| Speed Accuracy | ± 1 rpm | |
| Tilt Angle | 0 to 15°* | |
| Timer | 1 second to 160 hours | |
| Maximum Weight Capacity | 4,5 kg** | |
| Tray Material | Aluminium | |
| Tray Dimensions (L x W) | 32,4 x 25,4 cm | |
| Overall Dimensions (L x W x H) | 42,5 x 25,4 x 14,0 cm | |
| Ship Weight | 7 kg | |

| Model | Description | Item N° |
|--------------------------------|-----------------------|----------|
| SHWV02DG | Digital Waving Shaker | 30391949 |
| Specifications | | |
| Speed Range | 1 to 30 rpm* | |
| Speed Accuracy | ± 1 rpm | |
| Tilt Angle | 0 to 20°* | |
| Timer | 1 second to 160 hours | |
| Maximum Weight Capacity | 2,3 kg** | |
| Tray Material | Aluminium | |
| Tray Dimensions (L x W) | 29,9 x 22,2 cm | |
| Overall Dimensions (L x W x H) | 41,3 x 25,4 x 16,5 cm | |
| Ship Weight | 7,3 kg | |

* Maximum speed/tilt angle may vary with heavy or unbalanced loads. ** Centered on tray.

Incubating & Incubating Cooling Shakers



Incubating Cooling Thermal Shakers
Incubating Light Duty Orbital Shakers
Incubating Cooling Orbital Shakers
Incubating Rocking & Waving Shakers

Incubating & Incubating Cooling Selection Guide



| Product Family | Incubating Cooling Thermal Shakers | Incubating Light Duty Orbital Shaker | Incubating Light Duty Orbital Shakers |
|----------------------------------|--|--------------------------------------|---------------------------------------|
| Model | ISTHBLCTS (Heat/Cool) ISTHBLHTS (Heat) | ISLD04HDG | ISLDMPHDG ISLDMPHDGL (Opaque Lid) |
| Temperature Range | 17 below ambient to 100°C / ambient +4 to 100°C | Ambient +5° to 65°C | Ambient +5° to 65°C |
| Speed Range | 300 to 3000 rpm | 100 to 1200 rpm | 100 to 1200 rpm |
| Timer | 1 minute to 99 hours, 59 min | 1 second to 160 hours | 1 second to 160 hours |
| Motion | Orbital | Orbital | Orbital |
| Orbit | 3 mm | 3 mm | 3 mm |
| Max Weight Capacity | 1 Block | 3,6 kg | 4 Microplates / 2 Micro-Tube Racks |
| Audible Alarm | ● | ● | ● |
| Load Sensor | ● | — | — |
| Drive System | — | Triple Eccentric | Triple Eccentric |
| Motor Type | Brushless DC Motor | Brushless DC Motor | Brushless DC Motor |
| Set-Point Retention | ● Displays Last Setting | ● Displays Last Setting | ● Displays Last Setting |
| Restart/Power Out | ● | ● | ● |
| Ramp to Speed | ● | ● | ● |
| Temperature Overshoot Protection | ● | — | — |
| Overload Protection | ● | ● | ● |
| User Calibration (Temperature) | ● | ● | ● |
| User Calibration (Speed) | ● | — | — |
| Interface | USB | — | — |
| Overall Dimensions (L x W xH) | 26 x 24,8 x 13,2 cm | 43,2 x 27,9 x 26,7 cm | 43,2 x 27,9 x 19,7 cm |
| Included Tray (L x W) | N/A | 27,9 x 19,7 cm | 27,9 x 19,7 cm |
| Platform Options (L x W) | N/A | N/A | N/A |

● Yes * Maximum speed/tilt angle may vary with heavy or unbalanced loads. ** Centered on tray.

Incubating & Incubating Cooling Selection Guide



| Product Family | Incubating Cooling Light Duty Orbital Shaker | Incubating Rocking Shaker | Incubating Waving Shaker |
|----------------------------------|--|----------------------------|----------------------------|
| Model | ISICMBCDG | ISRK04HDG | ISWV02HDG |
| Temperature Range | 10°C Below Ambient to 65°C | Ambient +5° to 65°C | Ambient +5° to 65°C |
| Speed Range | 100 to 1200 rpm | 1 to 50 rpm | 1 to 30 rpm |
| Timer | 1 second to 160 hours | 1 second to 160 hours | 1 second to 160 hours |
| Motion | Orbital | Rocking | Waving |
| Orbit | 3 mm | Tilt Angle: 0 to 15° * | Tilt Angle: 0 to 20° * |
| Max Weight Capacity | 2 Microplates 2 Modular Blocks | 4,5 kg** | 2,3 kg** |
| Audible Alarm | ● | ● | — |
| Load Sensor | — | — | — |
| Drive System | Triple Eccentric | Cable | Cable |
| Motor Type | Brushless DC Motor | Stepper Motor | Stepper Motor |
| Set-Point Retention | ● Displays Last Setting | ● Displays Last Setting | ● Displays Last Setting |
| Restart/Power Out | ● | ● | — |
| Ramp to Speed | ● | ● | — |
| Temperature Overshoot Protection | — | — | — |
| Overload Protection | ● | ● | — |
| User Calibration (Temperature) | — | — | — |
| User Calibration (Speed) | — | — | — |
| Interface | — | — | — |
| Overall Dimensions (L × W × H) | 45,5 × 27,9 × 26,7 cm | 43,2 × 27,9 × 26,7 cm | 43,2 × 27,9 × 26,7 cm |
| Included Tray (L × W) | N/A | 25,4 × 19,1 cm | 23,5 × 18,4 cm |
| Platform Options (L × W) | N/A | N/A | N/A |

● Yes

* Maximum speed/tilt angle may vary with heavy or unbalanced loads. ** Centered on tray.

Incubating Cooling Thermal Shakers

Industry Leading Thermal Shaker with Exceptional Heating/ Cooling Performance with High Speed Shaking

- Best in class temperature performance. Enhanced electronics and software allow for fast and accurate temperature control you can trust. Cooling models reach temperatures down to 17°C below ambient.
- Intuitive touchscreen for simple operation and programming. Set the functions and the comprehensive help screens in one of six languages to guide the user through the operation of the unit.
- Easily create programs for repeat applications. Storage for five separate, 5-step programs. The USB port allows the transfer of test data to a flash drive for data logging and program storage.



| | |
|------------------------|--|
| Application | DNA, RNA, Cell Cultures, Hybridizations, Protein Studies |
| Display | 10,9 cm colour touchscreen Liquid Crystal Display (LCD) which can be programmed in six languages |
| Operation | Detachable 3-wire cord and plug (included), unit requires a block (1,5 ml block included) - compatible with Eppendorf Thermomixer® R blocks |
| Communication | USB port provides greater flexibility in data collection and transfer |
| Construction | Valox cool touch housing, removable plastic rack, cover and screwdriver for block removal (included) |
| Design Features | Hot top indicator, audible alarm, maximum temperature limiting function, temperature priority function, pulse/quick mix mode, temperature calibration mode, temperature ramp rate function |

| Model | Description | Item N° |
|--------------------------------|---|----------|
| ISTHBLHTS | Thermal Shaker | 30392005 |
| ISTHBLCTS | Cooling Thermal Shaker | 30391998 |
| Specifications | | |
| Temperature Range | Thermal Shaker 4°C above ambient to 100°C Cooling Thermal Shaker 17°C below ambient to 100°C | |
| Temperature Accuracy | Thermal Shaker ± 1°C between 20°C and 45°C ± 2°C above 45°C Cooling Thermal Shaker ± 0,5°C between 20°C and 45°C ± 2°C below 20°C and above 45°C | |
| Speed Range | 300 to 3000 rpm | |
| Speed Accuracy | ± 2% | |
| Timer | 1 minute to 99 hours, 59 minutes | |
| Orbit | 3 mm | |
| Cooling Rate | above ambient 2-3°C/min below ambient 0,5-1,0°C/min | |
| Heating Rate | 5°C/min | |
| Overall Dimensions (L x W x H) | 26 x 24,8 x 13,2 cm | |
| Ship Weight | 5,4 kg | |

Accessories for Incubating Cooling Thermal Shakers Modular Blocks



Microplate Block

| Sample Type | Well Size | Well Depth | Dimensions (L x W x H) | Item N° |
|-----------------------------------|----------------------|------------|------------------------|----------|
| Microplate Thermal Block with Lid | 12,8 x 8,6 x 0,25 cm | 2,30 cm | 11,9 x 16,3 x 7,6 cm | 30400126 |

| Sample Type | Well Diameter | Well Depth | Dimensions (L x W x H) | Item N° |
|---|---------------|------------|------------------------|----------|
| 384 Well Plate Thermal Block with Lid | 0,40 cm | 0,81 cm | 11,9 x 16,3 x 7,6 cm | 30400127 |
| 0,2 ml PCR Plate Thermal Block with Lid | 0,64 cm | 1,27 cm | 11,9 x 16,3 x 7,6 cm | 30400128 |

Tube Blocks

| Sample Type | N° of Wells | Well Diameter | Well Depth | Dimensions (L x W x H) | Item N° |
|--------------------|-------------|---------------|------------|------------------------|----------|
| 0,5 ml Microtubes* | 30 | 0,79 cm | 2,46 cm | 10,2 x 14,2 x 4,6 cm | 30400129 |
| 1,5 ml Microtubes* | 24 | 1,11 cm | 3,53 cm | 10,2 x 14,2 x 5,3 cm | 30400130 |
| 2,0 ml Microtubes* | 24 | 1,15 cm | 3,53 cm | 10,2 x 14,2 x 5,3 cm | 30400131 |
| 5-7 ml Tubes | 24 | 1,20 cm | 3,61 cm | 10,2 x 14,2 x 5,6 cm | 30400132 |

* Supplied with clear rack and cover

Racks and Covers

| Description | Item N° |
|---|----------|
| Rack For 30 X 0,5 ml Tube Block | 30400250 |
| Rack For 24X1,5 / 24X2,0 ml Tube Blocks | 30400251 |
| Cover For 0,5ml/1,5ml/2,0ml Tube Blocks | 30400252 |

Cryo Tube Block

| Sample Type | N° of Wells | Well Diameter | Well Depth | Dimensions (L x W x H) | Item N° |
|-------------------|-------------|---------------|------------|------------------------|----------|
| 2,0 ml Cryo Tubes | 24 | 1,26 cm | 3,6 cm | 10,2 x 14,2 x 5,6 cm | 30400133 |

Conical Tube Blocks

| Sample Type | N° of Wells | Well Diameter | Well Depth | Dimensions (L x W x H) | Item N° |
|---------------------------|-------------|---------------|------------|------------------------|----------|
| 5 ml Eppendorf Tube Block | 9 | 1,68 cm | 4,9 cm | 10,4 x 14,5 x 7,1 cm | 30400134 |
| 15 ml Conical Tubes | 9 | 1,73 cm | 10,44 cm | 10,7 x 14,7 x 12,7 cm | 30400135 |
| 50 ml Conical Tubes | 4 | 3,0 cm | 10,09 cm | 10,2 x 14,5 x 12,2 cm | 30400136 |

Incubating Light Duty Orbital Shakers

Save Bench Space with Combined Incubating and Shaking Features

- Designed to provide flexibility in your applications, these shakers with a 4 kg capacity include the ready to use tray to customize with over 10 easy-to-install accessories.
- When precision is required achieve temperature accuracy with the user-controlled temperature calibration feature for sensitive applications. Digital control for reliable and repeatable shaking speed.
- When precision is required achieve temperature accuracy with the user-controlled temperature calibration feature for sensitive applications. Digital control for reliable and repeatable shaking speed.



| | |
|------------------------|---|
| Application | Immunoassays, Hybridizations, Cell Cultures, Bacterial & Yeast Cultures and Suspensions, ELISA Assays, PCR, Enzyme Reactions |
| Display | Easy-to-read, independent LED displays for temperature, speed and time allow the operator to view all settings simultaneously |
| Operation | Detachable 3-wire cord and plug (included) |
| Construction | Cast aluminium housing with polycarbonate lid, brushless DC motor |
| Design Features | Spill-resistant design, overload protection, caution hot indicator |

| Model | Description | Item N° |
|---------------------------------|--------------------------------------|----------|
| ISLD04HDG | Incubating Light Duty Orbital Shaker | 30391919 |
| Specifications | | |
| Temperature Range | Ambient +5°C to 65°C | |
| Temperature Uniformity | ± 0,5°C at 37°C | |
| Speed Range | 100 to 1200 rpm | |
| Speed Accuracy | ± 2% of set speed | |
| Timer | 1 second to 160 hours | |
| Orbit | 3 mm | |
| Maximum Weight Capacity | 3,6 kg | |
| Tray Material | Aluminium | |
| Tray Dimensions (L x W) | 27,9 x 19,7 cm | |
| Interior Dimensions (L x W x H) | 28,7 x 21,1 x 14,5 cm | |
| Overall Dimensions (L x W x H) | 43,2 x 27,9 x 27 cm | |
| Ship Weight | 13,6 kg | |

| Model | Description | Item N° |
|--------------------------------|--|----------|
| ISLDMPHDG | Incubating Microplate Shaker | 30391933 |
| ISLDMPHDGL | Incubating Microplate Shaker with Opaque Lid | 30391926 |
| Specifications | | |
| Temperature Range | Ambient +5°C to 65°C | |
| Temperature Uniformity | ± 0,5°C at 37°C | |
| Speed Range | 100 to 1200 rpm | |
| Speed Accuracy | ± 2% | |
| Timer | 1 second to 160 hours | |
| Orbit | 3 mm | |
| Maximum Weight Capacity | 4 microplates or 2 micro-tube racks | |
| Tray Material | Aluminium | |
| Tray Dimensions (L x W) | 27,9 x 19,7 cm | |
| Overall Dimensions (L x W x H) | 43,2 x 27,9 x 19,7 cm | |
| Ship Weight | 13,6 kg | |

Incubating Cooling Orbital Shakers

Innovatively Designed Incubating Orbital Shaker to Heat, Cool and Shake Samples

- Designed to provide flexibility in your applications, these shakers are microplate ready - no accessories required, and can easily accommodate modular blocks with the included block adapter.
- When precision is required, achieve temperature accuracy with the unique temperature calibration feature for sensitive applications. Digital control for reliable and repeatable shaking speed.
- Innovative temperature system allows for fast, accurate and uniform temperatures you can trust. The unique Peltier design with direct plate-to-sample contact offers precise heating and cooling.



| | |
|------------------------|---|
| Application | Immunoassays, Hybridizations, Cell Cultures, Bacterial & Yeast Cultures and Suspensions, ELISA Assays, PCR, Enzyme Reactions |
| Display | Easy-to-read, independent LED displays for temperature, speed and time allow the operator to view all settings simultaneously |
| Operation | Detachable 3-wire cord and plug (included) |
| Construction | Cast aluminium housing with polycarbonate lid, brushless DC motor |
| Design Features | Spill-resistant design, overload protection, caution hot indicator |

| Model | Description | Item N° |
|----------------------------------|--------------------------------------|----------|
| ISICMBCDG | Incubating Cooling Light Duty Shaker | 30391940 |
| Specifications | | |
| Temperature Range | 10°C below ambient to 65°C | |
| Temperature Uniformity | ± 0,5°C at 37°C | |
| Speed Range using Microplates | 100 to 1200 rpm | |
| Speed Range using Modular Blocks | 100 to 600 rpm | |
| Speed Accuracy | ± 2% | |
| Timer | 1 second to 160 hours | |
| Orbit | 3 mm | |
| Maximum Weight Capacity | 2 microplates or 2 modular blocks | |
| Overall Dimensions (L x W x H) | 45,5 x 27,9 x 26,7 cm | |
| Ship Weight | 15,4 kg | |

Accessories for Incubating Cooling Orbital Shakers

Modular Blocks



Modular Blocks

Modular Blocks are constructed from a solid anodized aluminium block. The close contact of tubes to block walls allow for maximum temperature transfer.

Block dimensions (L x W x H): 9,5 x 7,6 x 5,1 cm

Applications: Cell cultures, hybridizations, and extraction procedures

OHAUS modular blocks also fit in the OHAUS Dry Block Heaters.

Constructed of anodized aluminium, this material is ideal for its temperature conducting and corrosion resistant properties.

Microcentrifuge Tube Blocks

Single block

| Sample Type | N° of Wells | Well Diameter | Well Depth | Item N° |
|-------------|-------------|---------------|------------|----------|
| 0,5 ml tube | 30 | 7,9 mm | 27,6 mm | 30400157 |
| 1,5 ml tube | 20 | 11,1 mm | 39,1 mm | 30400159 |
| 2 ml tube | 20 | 11,5 mm | 38,1 mm | 30400191 |

Conical-Bottom Centrifuge Tube Blocks

Single block

| Sample Type | N° of Wells | Well Diameter | Well Depth | Item N° |
|-------------|-------------|---------------|------------|----------|
| 15 ml tube | 12 | 17,1 mm | 44,5 mm | 30400172 |
| 50 ml tube | 5 | 29,0 mm | 47,6 mm | 30400168 |



Accessories for Incubating Cooling Orbital Shakers

Modular Blocks

Standard Test Tube Blocks

Single block

| Sample Type | N° of Wells | Well Diameter | Well Depth | Item N° |
|---------------|-------------|---------------|------------|----------|
| 6 mm tube | 30 | 8,3 mm | 48,4 mm | 30400158 |
| 10 mm tube | 24 | 10,7 mm | 48,4 mm | 30400151 |
| 12/13 mm tube | 20 | 13,9 mm | 48,4 mm | 30400152 |



Combination Blocks

Single block

These blocks have been designed for variable sized samples.

| Sample Type | N° of Wells | Well Diameter | Well Depth | Item N° |
|------------------------------------|-------------|---------------|------------|----------|
| Test Tube Combination | | | | |
| 6 mm | 6 | 8,3 mm | 48,4 mm | 30400156 |
| 12/13 mm | 5 | 13,8 mm | 48,4 mm | |
| 25 mm | 3 | 26,2 mm | 48,4 mm | |
| Centrifuge Tube Combination | | | | |
| 1,5 ml | 4 | 11,1 mm | 39,1 mm | 30400193 |
| 15 ml | 3 | 17,1 mm | 44,5 mm | |
| 50 ml | 2 | 29,0 mm | 47,6 mm | |
| Micro-Tube Combination | | | | |
| 0,5 ml | 6 | 7,9 mm | 27,6 mm | 30400194 |
| 1,5 ml | 10 | 11,1 mm | 39,1 mm | |
| 2 ml | 5 | 11,5 mm | 38,1 mm | |



Vial Blocks

Single block

Designed for sample/serum and scintillation vials.

| Sample Type | N° of Wells | Well Diameter | Well Depth | Item N° |
|-------------|-------------|---------------|------------|----------|
| 12 mm vial | 20 | 12,7 mm | 30 mm | 30400182 |
| 15 mm vial | 20 | 15,8 mm | 35 mm | 30400183 |
| 16 mm vial | 15 | 16,4 mm | 45 mm | 30400190 |
| 17 mm vial | 12 | 17,8 mm | 45 mm | 30400184 |
| 19 mm vial | 12 | 19,7 mm | 45 mm | 30400185 |
| 21 mm vial | 9 | 21,7 mm | 45 mm | 30400186 |
| 23 mm vial | 8 | 23,8 mm | 45 mm | 30400187 |
| 25 mm vial | 8 | 25,8 mm | 45 mm | 30400188 |
| 28 mm vial | 6 | 28,8 mm | 45 mm | 30400189 |



Incubating Rocking & Waving Shakers

Save Incubator Space with Unique Benchtop Incubating Rocking and Waving Shakers

- Electronic control allows simple tilt angle, speed and temperature adjustments while the unit is still running to achieve optimal mixing.
- Achieve reproducible results you can trust. Precisely adjust the tilt angle in 1° increments, vary the speed by 1 rpm and set temperature in 1°C increments with intuitive touchpad controls.
- Innovative speed ramping feature slowly increases speed to desired setpoint to avoid splashing. Smooth rocking or waving motion is maintained with unique, state-of-the-art motor and electronics.



| | |
|------------------------|---|
| Application | Hybridizations, Cell Cultures, Blotting Techniques, Staining and Destaining Gels |
| Display | Easy-to-read, independent LED displays for temperature, speed/tilt angle and time allow the operator to view all settings simultaneously |
| Operation | Detachable 3-wire cord and plug (included) |
| Construction | Cast aluminium housing with polycarbonate lid |
| Design Features | Spill-resistant design, overload protection with audio/visual alarm on digital models and audible alarm on analog models, caution hot indicator |

| Model | Description | Item N° |
|---------------------------------|---------------------------|----------|
| ISRK04HDG | Incubating Rocking Shaker | 30391975 |
| Specifications | | |
| Temperature Range | Ambient +5°C to 65°C | |
| Temperature Uniformity | ± 0,5°C at 37°C | |
| Speed Range | 1 to 50 rpm * | |
| Speed Accuracy | ± 1 rpm | |
| Tilt Angle | 0 to 15° * | |
| Timer | 1 second to 160 hours | |
| Maximum Weight Capacity | 4,5 kg ** | |
| Tray Material | Aluminium | |
| Tray Dimensions (L x W) | 25,4 x 19,1 cm | |
| Interior Dimensions (L x W x H) | 27,3 x 19,7 x 9,7 cm | |
| Overall Dimensions (L x W x H) | 43,2 x 27,9 x 26,7 cm | |
| Ship Weight | 10 kg | |

| Model | Description | Item N° |
|---------------------------------|--------------------------|----------|
| ISWV02HDG | Incubating Waving Shaker | 30391982 |
| Specifications | | |
| Temperature Range | Ambient +5°C to 65°C | |
| Temperature Uniformity | ± 0,5°C at 37°C | |
| Speed Range | 1 to 30 rpm * | |
| Speed Accuracy | ± 1 rpm | |
| Tilt Angle | 0 to 20° * | |
| Timer | 1 second to 160 hours | |
| Maximum Weight Capacity | 2,3 kg ** | |
| Tray Material | Aluminium | |
| Tray Dimensions (L x W) | 23,5 x 18,4 cm | |
| Interior Dimensions (L x W x H) | 27,3 x 19,7 x 8,6 cm | |
| Overall Dimensions (L x W x H) | 43,2 x 27,9 x 26,7 cm | |
| Ship Weight | 10 kg | |

* Maximum speed/tilt angle may vary with heavy or unbalanced loads. ** Centered on tray.

Accessories for Open Air and Incubating Shakers

Universal Platforms

Allows for mounting of flask clamps, test tube racks, and bottle clamps. Platform slides over top of included tray and is tightened with adjustment screws. Optional accessories screw directly into mounting point openings. The two-tier braces allow stacking of platforms with a 25,4 cm clearance (available for select sizes). An optional non-skid rubber mat can be placed on the platform for an added non-slip surface. The platform is constructed of type 304 stainless steel.



| Description | Used on Shakers | Item N° |
|------------------------------------|--|----------|
| 27,9 × 33 cm Universal Platform | Analog/Digital 16 kg Shakers and Reciprocating Shakers | 30400052 |
| 33 × 33 cm Universal Platform | Analog/Digital 16 kg Shakers and Reciprocating Shakers | 30400053 |
| 45,7 × 45,7 cm Universal Platform* | Analog/Digital 16 kg Shakers and Reciprocating Shakers** | 30400054 |
| 45,7 × 61 cm Universal Platform* | Analog/Digital 16 kg & 23 kg Shakers** and Reciprocating Shakers** | 30400056 |
| 61 × 61 cm Universal Platform | Digital 45 kg Shakers | 30400057 |
| 45,7 × 76,2 cm Universal Platform* | Analog/Digital 23 kg Shakers | 30400058 |
| 61 × 91,4 cm Universal Platform | Digital 68 kg Shakers | 30400059 |
| Two-Tier Braces (set of 4) | Analog/Digital 16 kg & 23 kg Shakers | 30400051 |

Rubber Mats

| Description | Used on Shakers | Item N° |
|---------------------------|---|----------|
| 27,9 × 33 cm Rubber Mat | Analog/Digital 16 kg Shakers and Reciprocating Shakers | 30400060 |
| 33 × 33 cm Rubber Mat | Analog/Digital 16 kg Shakers and Reciprocating Shakers | 30400061 |
| 45,7 × 45,7 cm Rubber Mat | Analog/Digital 16 kg Shakers and Reciprocating Shakers | 30400062 |
| 45,7 × 61 cm Rubber Mat | Analog/Digital 16 kg Shakers, Reciprocating Shakers and Analog Digital 23kg Shakers | 30400063 |
| 61 × 61 cm Rubber Mat | Digital 45 kg Shakers | 30400064 |
| 61 × 91,4 cm Rubber Mat | Digital 68 kg Shakers | 30400065 |

Culture Platforms

Ideal for slow speed applications; Petri dishes, culture flasks, and other flat bottom, low profile vessels. The two-tier braces (available for both sizes) allow stacking of platforms with a 25,4 cm clearance. The platform is constructed of type 304 stainless steel. The platform has a non-skid rubber surface.



| Description | Used on Shakers | Item N° |
|----------------------------------|---|----------|
| 45,7 × 45,7 cm Culture Platform* | Analog/Digital 16 kg Shakers* and Reciprocating Shakers** | 30400066 |
| 45,7 × 61 cm Culture Platform* | Analog/Digital 16 kg* & 23 kg Shakers and Reciprocating Shakers** | 30400067 |
| Two-Tier Braces (set of 4) | Analog/Digital 16 kg & 23 kg Shakers | 30400051 |

* Two-tier ready. ** Stacking of platforms is not recommended for Reciprocating Shaker.

Accessories for Open Air and Incubating Shakers

Dedicated Platforms

Pre-mounted flask clamps for maximum utilization of platform space for flasks of all one size. The two-tier braces allow stacking of platforms with a clearance (available for select sizes). Platform is constructed of type 304 stainless steel. Flask clamps are constructed of PVC. Ideal for polycarbonate flasks.



| Description | Flask Capacity | Used on Shakers | Item N° |
|---|----------------|---|----------|
| 33 × 33 cm Dedicated Platform / 125 ml Flask Clamp | 16 | Analog/Digital 16 kg Shakers and Reciprocating Shakers | 30400075 |
| 33 × 33 cm Dedicated Platform / 250 ml Flask Clamp | 12 | Analog/Digital 16 kg Shakers and Reciprocating Shakers | 30400076 |
| 33 × 33 cm Dedicated Platform / 500 ml Flask Clamp | 8 | Analog/Digital 16 kg Shakers and Reciprocating Shakers | 30400077 |
| 33 × 33 cm Dedicated Platform / 1 L Flask Clamp | 4 | Analog/Digital 16 kg Shakers and Reciprocating Shakers | 30400078 |
| 45,7 × 45,7 cm Dedicated Platform / 125 ml Flask Clamp* | 27 | Analog/Digital 16 kg Shakers and Reciprocating Shakers ** | 30400079 |
| 45,7 × 45,7 cm Dedicated Platform / 250 ml Flask Clamp* | 20 | Analog/Digital 16 kg Shakers and Reciprocating Shakers ** | 30400080 |
| 45,7 × 45,7 cm Dedicated Platform / 500 ml Flask Clamp* | 13 | Analog/Digital 16 kg Shakers and Reciprocating Shakers ** | 30400081 |
| 45,7 × 45,7 cm Dedicated Platform / 1 L Flask Clamp | 9 | Analog/Digital 16 kg Shakers and Reciprocating Shakers ** | 30400082 |
| Two-Tier Braces (set of 4) | | Analog/Digital 16 kg Shakers | 30400051 |

Adjustable Platforms

Adjustable clamping bars accommodate various vessel types. Constructed of stainless steel. The base tray has a non-skid rubber surface.



| Description | Bar Size | Overall Dimensions | Used on Shakers | Item N° |
|---------------------------|----------|--------------------|-------------------------------|----------|
| 2-bar Adjustable Platform | 21,8 cm | 21,8 × 29,7 cm | Digital 4 kg Shakers | 30400121 |
| 4-bar Adjustable Platform | 45,7 cm | 45,7 × 45,7 cm | Analog/ Digital 16 kg shakers | 30400068 |
| 4-bar Adjustable Platform | 45,7 cm | 45,7 × 61 cm | Analog/ Digital 23 kg shakers | 30400069 |

Replacement Parts

| Description | Used with Platforms | Item N° |
|---|---------------------|----------|
| 21,8 cm Adjustable Bar (with Mounting Hardware) | 30400121 | 30400122 |
| 45,7 cm Adjustable Bar (with Mounting Hardware) | 30400068 & 3040069 | 30400073 |

Accessories for Open Air and Incubating Shakers

Large Vessel Carrier Platforms

Ideal for large sample containers like carboys, jugs, and bottles. The platforms' high side walls secure samples, has a heavy-duty design and is constructed of stainless steel. The base tray has a non-skid rubber surface.



| Description | Bar Size | Overall Dimensions (L x W x H) | Used on Shakers | Item N° |
|-------------------------------------|----------|--------------------------------|------------------------------|----------|
| 4-bar Large Vessel Carrier Platform | 45,7 cm | 76,4 x 45,9 x 35,3 cm | Analog/Digital 23 kg Shakers | 30400070 |
| 4-bar Large Vessel Carrier Platform | 61 cm | 61,9 x 61,7 x 36,0 cm | Digital 45 kg Shakers | 30400071 |
| 5-bar Large Vessel Carrier Platform | 61 cm | 93,7 x 61,7 x 36,0 cm | Digital 68 kg Shakers | 30400072 |

| Replacement Part | Used with Carrier | Item N° |
|---|---------------------|----------|
| 45,7 cm adjustable bar (with mounting hardware) | 30400070 | 30400073 |
| 61 cm adjustable bar (with mounting hardware) | 30400071 & 30400072 | 30400074 |

Separatory Funnel Platform

Holds 3 funnels at once on a 45,7 x 45,7 cm platform. Platform can accommodate 500 ml to 2 L separatory funnels and is constructed of stainless steel. Includes platform, clamps and hardware to secure 3 funnels.



| Description | Used on Shakers | Item N° |
|---|--|----------|
| Separatory Funnel Platform (45,7 x 45,7 cm) | Analog/Digital 16 kg Shakers and Reciprocating Shakers | 30400083 |

Microplate Clamp

Can hold one standard microplate or deep-well plate. Constructed of type 304 stainless steel.

Platform Capacities for Microplate Clamps

| Platform Size | Microplate Clamps | Platform N° |
|----------------|-------------------|-------------|
| 27,9 x 33 cm | 4 | 30400052 |
| 33 x 33 cm | 6 | 30400053 |
| 45,7 x 45,7 cm | 12 | 30400054 |
| 45,7 x 61 cm | 18 | 30400056 |
| 45,7 x 76,2 cm | 21 | 30400057 |
| 61 x 61 cm | 24 | 30400058 |
| 61 x 91,4 cm | 36 | 30400059 |



| Description | Used on Shakers | Item N° |
|------------------|---|----------|
| Microplate Clamp | Analog/Digital 16 kg, 23 kg, 45 kg, & 68 kg Shakers | 30400104 |

Accessories for Open Air and Incubating Shakers

Universal Harness

Attaches to tray to secure low profile plates.

| Description | Used on Shakers | Item N° |
|-------------------|---------------------------------------|----------|
| Universal Harness | Digital 4 kg Open Air Orbital Shakers | 30400123 |

Universal Harness



Dimpled Mat

Designed to hold centrifuge tubes, vials, culture tubes, and micro-tubes securely in place. Mat can easily be removed for cleaning and transporting of tubes from bench to tray.

| Description | Used on Shakers | Item N° |
|-----------------------------|--------------------------------|----------|
| Dimpled Mat, 32,4 × 25,4 cm | Digital Rocking Shaker | 30400140 |
| Dimpled Mat, 29,9 × 22,2 cm | Digital Waving Shaker | 30400142 |
| Dimpled Mat, 25,4 × 19,1 cm | Incubating Rocking Shaker | 30400141 |
| Dimpled Mat, 23,5 × 18,4 cm | Incubating Waving Shaker | 30400143 |
| Dimpled Mat, 29,9 × 22,2 cm | Open Air 4 kg Orbital Shaker | 30400124 |
| Dimpled Mat, 35,6 × 27,9 cm | Analog Rocking & Waving Shaker | 30400144 |

Dimpled Mat



Stacking Tray

Easily attaches to the units' included tray to add a second tier for higher capacity applications. Second tier tray mounts 8,9 cm above lower tray. The tray includes hardware and a rubber mat.

| Description | Used on Shakers | Item N° |
|-------------------------------|------------------------|----------|
| Stacking Tray, 32,4 × 25,4 cm | Digital Rocking Shaker | 30400137 |
| Stacking Tray, 29,9 × 22,2 cm | Digital Waving Shaker | 30400138 |
| Stacking Tray, 35,6 × 27,9 cm | Analog Rocking Shaker | 30400139 |

Stacking Tray



Dilution Cup Tray

Constructed of type 304 stainless steel. Holds 24 × 28 mm dilution vials.

| Description | Used on Unit | Item N° |
|-------------------|---------------------------------------|----------|
| Dilution Cup Tray | Digital 4 kg Open Air Orbital Shakers | 30400125 |

Dilution Cup Tray



Micro-Tube Rack

Optional 1,5 to 2 ml Micro-Tube Rack attaches to tray to hold up to 70 × 1,5 ml or 2 ml micro-tubes. Tray can accommodate up to 2 micro-tube racks.

| Description | Used on Unit | Item N° |
|-----------------|---|----------|
| Micro-Tube Rack | Digital Open Air and Incubating Microplate Shaker | 30400114 |

Micro-Tube Rack



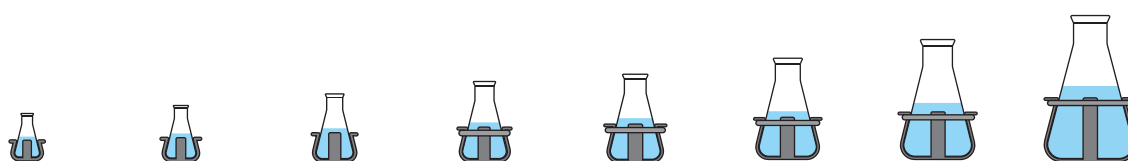


Incubating & Cooling Shakers

Accessories for Open Air and Incubating Shakers

Stainless Steel Flask Clamps

Designed to hold Erlenmeyer flasks from 10 ml to 6 L. Constructed of type 302 and 304 stainless steel. Includes hardware for easy attachment to platforms. Flask clamps 50 ml and higher are supplied with a spring to hold the flask in place. The 2,8 L clamp is designed to hold a Fernbach flask. Media bottle clamps feature the same details as flask clamps.



| Clamp Style | 10 ml Erlenmeyer Flask Clamp | 25 ml Erlenmeyer Flask Clamp | 50 ml Erlenmeyer Flask Clamp | 125 ml Erlenmeyer Flask Clamp | 250 ml Erlenmeyer Flask Clamp | 500 ml Erlenmeyer Flask Clamp | 1 L Erlenmeyer Flask Clamp | 2 L Erlenmeyer Flask Clamp |
|---|---|------------------------------|------------------------------|-------------------------------|-------------------------------|-------------------------------|----------------------------|----------------------------|
| Material | Stainless Steel | Stainless Steel | Stainless Steel | Stainless Steel | Stainless Steel | Stainless Steel | Stainless Steel | Stainless Steel |
| Item Number | 30400084 | 30400085 | 30400086 | 30400087 | 30400088 | 30400089 | 30400090 | 30400091 |
| Tray or Platform | Number of Flask Clamps per Tray or Platform | | | | | | | |
| 29,9 × 22,2 cm Open Air Digital 4 kg Shakers | 35 | 20 | 15 | 12 | 6 | 4 | N/A | N/A |
| 27,9 × 19,7 cm Incubating 4 kg Shakers | 35 | 20 | 12 | 8 | 5 | N/A | N/A | N/A |
| 27,9 × 33 cm Analog/Digital 16 kg Shakers | 60 | 25 | 13 | 10 | 9 | 7 | 4 | N/A |
| Digital Reciprocating Shakers | 60 | 25 | 13 | 10 | 9 | 7 | 4 | N/A |
| 33 × 33 cm Analog/Digital 16 kg Shakers | 60 | 30 | 15 | 12 | 12 | 8 | 4 | 3 |
| Digital Reciprocating Shakers | 60 | 30 | 15 | 12 | 12 | 8 | 4 | 3 |
| 45,7 × 45,7 cm Analog/Digital 16 kg Shakers | 113 | 64 | 32 | 20 | 20 | 13 | 8 | 5 |
| Digital Reciprocating Shakers | 113 | 64 | 32 | 20 | 20 | 13 | 8 | 5 |
| 45,7 × 61 cm Analog/Digital 16 kg Shakers | 158 | 88 | 44 | 28 | 28 | 20 | 12 | 6 |
| Digital Reciprocating Shakers | 158 | 88 | 44 | 28 | 28 | 20 | 12 | 6 |
| Analog/Digital 23 kg Shakers | 158 | 88 | 44 | 28 | 28 | 20 | 12 | 6 |
| 45,7 × 76,2 cm Analog/Digital 23 kg Shakers | 203 | 112 | 56 | 36 | 36 | 26 | 15 | 8 |
| 61 × 61 cm Digital 45 kg Shakers | 221 | 121 | 61 | 41 | 41 | 25 | 16 | 9 |
| 61 × 91,4 cm Digital 63 kg Shakers | 336 | 160 | 94 | 61 | 64 | 40 | 24 | 14 |

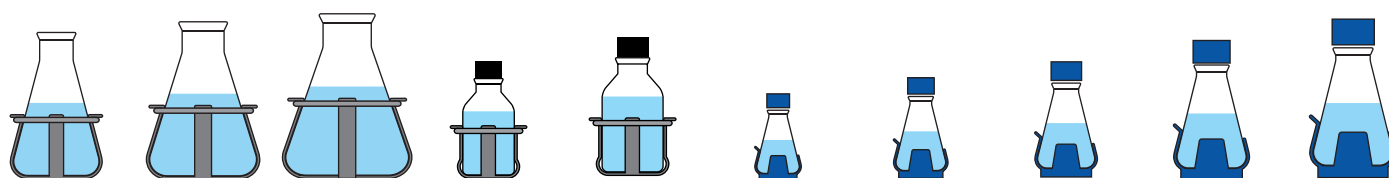
*All units require a universal platform for mounting flask clamps or test tube racks with the exception of the digital open air and incubating 4 kg shakers.

Accessories for Open Air and Incubating Shakers

PVC Flask Clamps

Constructed of one piece, molded PVC. Autoclavable. Will not scratch or mark flask like other clamps. Includes hardware for easy attachment to universal platforms. The attachment and removal of flasks is quick and easy. Ideal for polycarbonate flasks.

PVC Flask Clamps



| 2,8 L & 3 L Fernbach Flask Clamp | 4 L Erlenmeyer Flask Clamp | 5 L & 6 L Erlenmeyer Flask Clamp | 500 ml Media Bottle Clamp | 1 L Media Bottle Clamp | 125 ml Erlenmeyer Flask Clamp | 250 ml Erlenmeyer Flask Clamp | 500 ml Erlenmeyer Flask Clamp | 1 L Erlenmeyer Flask Clamp | 2 L Erlenmeyer Flask Clamp |
|---|----------------------------|----------------------------------|---------------------------|------------------------|-------------------------------|-------------------------------|-------------------------------|----------------------------|----------------------------|
| Stainless Steel | Stainless Steel | Stainless Steel | Stainless Steel | Stainless Steel | PVC | PVC | PVC | PVC | PVC |
| 2,8L-30400092 3L-30400093 | 30400094 | 5 L-30400095 6 L-30400096 | 30400097 | 30400098 | 30400099 | 30400100 | 30400101 | 30400102 | 30400103 |
| Number of Flask Clamps per Tray or Platform | | | | | | | | | |
| N/A | N/A | N/A | 3 | N/A | 12 | 6 | 4 | N/A | N/A |
| N/A | N/A | N/A | N/A | N/A | 8 | 4 | N/A | N/A | N/A |
| N/A | N/A | N/A | 5 | 2 | 10 | 8 | 5 | 2 | N/A |
| N/A | N/A | N/A | 5 | 2 | 10 | 8 | 5 | 2 | N/A |
| 1 | 1 | 1 | 6 | 5 | 12 | 10 | 6 | 4 | 3 |
| 1 | 1 | 1 | 6 | 5 | 12 | 10 | 6 | 4 | 3 |
| 2 | 4 | 2 | 16 | 10 | 20 | 18 | 12 | 8 | 4 |
| 2 | 4 | 2 | 16 | 10 | 20 | 18 | 12 | 8 | 4 |
| 3 | 4 | 3 | 20 | 13 | 28 | 25 | 16 | 10 | 6 |
| 3 | 4 | 3 | 20 | 13 | 28 | 25 | 16 | 10 | 6 |
| 3 | 4 | 3 | 20 | 13 | 28 | 25 | 16 | 10 | 6 |
| 3 | 6 | 4 | 28 | 18 | 36 | 33 | 20 | 14 | 8 |
| 5 | 5 | 5 | 25 | 18 | 41 | 35 | 24 | 13 | 9 |
| 7 | 9 | 7 | 40 | 30 | 61 | 55 | 38 | 22 | 13 |

Accessories for Open Air and Incubating Shakers

Test Tube Racks

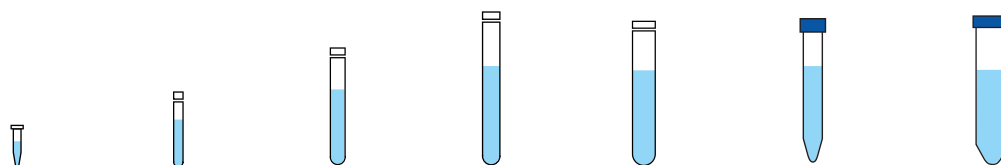
Half Size, Stationary

Racks constructed of PVC coated steel. Includes hardware for easy attachment to platforms.

Dimensions:

12,7 × 17,8 × 10,2 cm / Micro-Tube Rack: 4,3 cm H.

Test Tube Racks Half-Size, Stationary



| Test Tube Style | 1,5 to 2 ml Micro-Tube Rack Half Size, Stationary | 10 to 13 mm Test Tube Rack Half Size, Stationary | 14 to 16 mm Test Tube Rack Half Size, Stationary | 18 to 20 mm Test Tube Rack Half Size, Stationary | 22 to 25 mm Test Tube Rack Half Size, Stationary | 15 ml Centrifuge Tube Rack Half Size, Stationary | 50 ml Centrifuge Tube Rack Half Size, Stationary |
|---|--|---|---|---|---|---|---|
| Tube Capacity | 70 | 63 | 48 | 35 | 24 | 35 | 12 |
| Item Number | 30400114 | 30400115 | 30400116 | 30400117 | 30400118 | 30400119 | 30400120 |
| Tray or Platform | Number of Test Tube Racks per Tray or Platform | | | | | | |
| 29,9 × 22,2 cm Digital Open Air 4 kg Shakers | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 27,9 × 19,7 cm Incubating 4 kg Shakers | 2 | 1 | 1 | N/A | N/A | 1 | 1 |
| Digital Open Air 4 kg Shakers | 2 | N/A | N/A | N/A | N/A | N/A | N/A |
| Incubating Microplate Shakers | 2 | N/A | N/A | N/A | N/A | N/A | N/A |
| 27,9 × 33 cm Analog/Digital 16 kg Shakers | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Digital Reciprocating Shakers | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 33 cm × 33 cm Analog/Digital 16 kg Shakers | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Digital Reciprocating Shakers | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 45,7 × 45,7 cm Analog/Digital 16 kg Shaker | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Digital Reciprocating Shakers | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 45,7 × 61 cm Analog/Digital 16 kg Shakers | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Digital Reciprocating Shakers | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Analog/Digital 23 kg Shakers | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 45,7 × 76,2 cm Analog/Digital 23 kg Shakers | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| 61 × 61 cm Digital 45 kg Shakers | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| 61 × 91,4 cm Digital 63 kg Shakers | 7 | 7 | 7 | 7 | 7 | 7 | 7 |

*All units require a universal platform for mounting flask clamps or test tube racks with the exception of the digital open air and incubating 4 kg shakers.

Accessories for Open Air and Incubating Shakers

Test Tube Racks

Full Size, Stationary

Racks constructed of PVC coated steel. Includes hardware for easy attachment to platforms.

Dimensions:

9,5 × 41,9 × 10,2 cm

Full Size, Pivoting

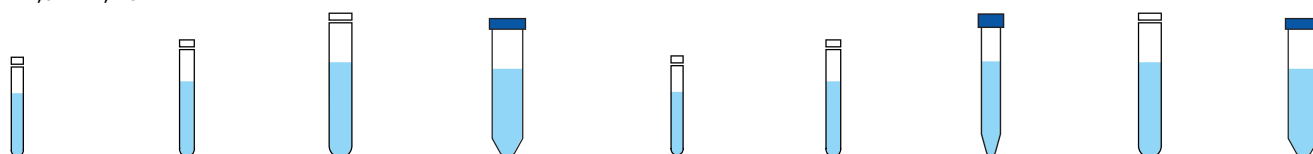
Has adjustable angle, custom tilt. Stainless steel holder includes removable plastic rack. Rack is easily removed to transport from work area to shaker.

Inside pivoting rack dimensions:

12,9 × 27,4 × 9,9 cm

Outside stationary rack dimensions:

12,7 × 27,6 × 12,7 cm



| 10 to 14 mm Test Tube Rack Full Size, Stationary | 16 to 20 mm Test Tube Rack Full Size, Stationary | 21 to 25 mm Test Tube Rack Full Size Stationary | 50 ml Centrifuge Tube Rack Full Size, Stationary | 13 mm Test Tube Rack Full Size, Pivoting | 16 mm Test Tube Rack Full Size, Pivoting | 20 mm Test Tube Rack Full Size, Pivoting | 25 mm Tube Rack Full Size, Pivoting | 30 mm Tube Rack Full Size, Pivoting |
|---|---|--|---|---|---|---|--|--|
| 48 | 33 | 21 | 17 | 90 | 60 | 40 | 24 | 21 |
| 30400110 | 30400111 | 30400112 | 30400113 | 30400105 | 30400106 | 30400107 | 30400108 | 30400109 |
| Number of Test Tube Racks per Tray or Platform | | | | | | | | |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | N/A | 1 | 1 | 1 | 1 | 1 |
| N/A | N/A | N/A | N/A | 1 | 1 | 1 | 1 | 1 |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 5 | 5 | 5 | 5 | 3 | 3 | 3 | 3 | 3 |
| 5 | 5 | 5 | 5 | 3 | 3 | 3 | 3 | 3 |
| 5 | 5 | 5 | 5 | 3 | 3 | 3 | 3 | 3 |
| 6 | 6 | 6 | 6 | 4 | 4 | 4 | 4 | 4 |
| 7 | 7 | 7 | 7 | 4 | 4 | 4 | 4 | 4 |
| 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 |

Incubating & Incubating Cooling Shakers

Vortex Mixers



*Mini Vortex Mixers
Heavy-Duty Vortex Mixers
Microplate Vortex Mixers
Multi-Tube Vortex Mixers*

Vortex Mixers Selection Guide



| Product Family | Mini Vortex Mixers | Mini Vortex Mixers | Mini Vortex Mixers | Mini Vortex Mixers |
|-------------------------------|-----------------------|-----------------------------|-----------------------|-----------------------|
| Model | VXMNFS | VXMNAL_LEFT_PLATFORM-INSERT | VXMNDG | VXMNPS |
| Capacity | 0,5 kg | 0,5 kg | 0,5 kg | 0,5 kg |
| Control | Fixed Speed | Analog | Digital | Pulsing |
| Duty Rating | Intermittent | Intermittent | Intermittent | Intermittent |
| Orbit | 4,9 mm | 4,9 mm | 4,9 mm | 2,5 mm |
| Speed Range | 2500 rpm | 300 rpm – 2500 rpm | 500 rpm – 2500 rpm | 500 rpm – 2500 rpm |
| Overall Dimensions (L x W xH) | 21,0 x 12,3 x 16,5 cm | 21,0 x 12,3 x 16,5 cm | 21,0 x 12,3 x 16,5 cm | 21,0 x 12,3 x 16,5 cm |



| Product Family | Heavy-Duty Vortex Mixers | Heavy-Duty Vortex Mixers | Microplate Vortex Mixers | Microplate Vortex Mixers |
|-------------------------------|---|---|---|---|
| Model | VXHDAL | VXHDDG | VXMPAL | VXMPDG |
| Capacity | 1,1 kg | 1,1 kg | 2 Microplates | 2 Microplates |
| Control | Analog | Digital | Analog | Digital |
| Duty Rating | Continuous | Continuous | Continuous | Continuous |
| Orbit | 4,9 mm | 4,9 mm | 3,5 mm | 3,5 mm |
| Speed Range | On Mode, 300 rpm – 2500 rpm Touch Mode, 300 rpm – 3500 rpm | On Mode, 300 rpm – 2500 rpm Touch Mode, 300 rpm – 3500 rpm | On Mode, 300 rpm – 2500 rpm Touch Mode, 300 rpm – 3500 rpm | On Mode, 300 rpm – 2500 rpm Touch Mode, 300 rpm – 3500 rpm |
| Overall Dimensions (L x W xH) | 24,1 x 16,8 x 16,0 cm | 24,1 x 16,8 x 16,0 cm | 26,7 x 13,7 x 11,4 cm | 26,7 x 13,7 x 11,4 cm |

Vortex Mixers Selection Guide



| Product Family | Multi-Tube Vortex Mixers | Multi-Tube Vortex Mixers |
|-------------------------------|--------------------------|--------------------------|
| Model | VXMTAL | VXMTDG |
| Capacity | 4,5 kg | 4,5 kg |
| Control | Analog | Digital |
| Duty Rating | Continuous | Continuous |
| Orbit | 3,6 mm | 3,6 mm |
| Speed Range | 1200 rpm – 2400 rpm | 500 rpm – 2500 rpm |
| Tray Size (L x W) | 18,4 x 31,1 cm | 18,4 x 31,1 cm |
| Overall Dimensions (L x W xH) | 24,1 x 38,4 x 40,4 cm | 24,1 x 38,4 x 40,4 cm |

Mini Vortex Mixers

Choose the Perfect Vortex Mixer From Four Durable Models for Everyday Mixing

- Touch mode operation activates mixing when depressing the cup head or continuous mode for use with accessory attachments. Sturdy, rugged design ensures the unit stays in place while in use.
- Robust digital and non-digital Vortex Mixers offer effective speed control from low RPM start-up for gentle shaking to high-speed mixing for vigorous vortexing of samples.
- The Fixed Speed Vortex Mixer is an economical choice for vigorous mixing of samples at high speed. To ease repetitive sample processing, this unit provides simple, effective full-speed mixing.



| | |
|------------------------|--|
| Application | Re-Suspending Liquids, Mixing Reagents, Buffers and Emulsions, ELISA Assay, Drug Extractions, Mixing Samples |
| Display | Independent LED displays for speed/time allow the operator to view both settings simultaneously (digital models) and adjustment knob with dial markings for variable speed control (analog models) |
| Operation | Detachable 3-wire cord and plug (included) |
| Construction | Cup head and 3-inch accessory platform for beakers, flasks, test tubes etc. (included with all models), stainless steel microtube holder for 12 tubes (pulsing models) |
| Design Features | Microprocessor-control to maintain set speed for consistent mixing action (digital models), 230V models have a maximum speed of 2500 rpm |

| Model | Description | Item N° |
|------------------------|--------------------------|----------|
| VXMNFS | Fixed Speed Vortex Mixer | 30392110 |
| Specifications | | |
| Speed Range 230V | 2500 rpm | |
| Orbit | 4,9 mm | |
| Controls | None | |
| Duty Rating | Intermittent duty | |
| Dimensions (L x W x H) | 21,1 x 12,2 x 16,5 cm | |
| Ship Weight | 4,5 kg | |

| Model | Description | Item N° |
|------------------------|---|----------|
| VXMNDG | Digital Vortex Mixer | 30392124 |
| Specifications | | |
| Speed Range* 230V | 300 to 2500 rpm | |
| Timer | 1 second to 160 hours | |
| Orbit | 4,9 mm | |
| Controls | Auto/Standby/On Rocker Switch, LED Displays for Speed/Time, Up/Down Buttons for Set-Point Control | |
| Duty Rating | Intermittent duty | |
| Dimensions (L x W x H) | 21,1 x 12,2 x 16,5 cm | |
| Ship Weight | 4,5 kg | |

Accessories included in price:

| Description | Item N° |
|--|----------|
| Cup Head | 30400235 |
| 7,6 cm Head | 30400236 |
| 7,6 cm Rubber Head Cover | 30400237 |
| Stainless Steel Tube Holder (only with 30392131) | 30400206 |

| Model | Description | Item N° |
|------------------------|--|----------|
| VXMNAL | Analog Vortex Mixer | 30392117 |
| Specifications | | |
| Speed Range* 230V | 500 to 2500 rpm | |
| Orbit | 4,9 mm | |
| Controls | Auto/Off/On Rocker Switch, Speed Knob: Variable 1 to 10 Dial Marks | |
| Duty Rating | Intermittent duty | |
| Dimensions (L x W x H) | 21,1 x 12,2 x 16,5 cm | |
| Ship Weight | 4,5 kg | |

| Model | Description | Item N° |
|------------------------|--|----------|
| VXMNPS | Pulsing Vortex Mixer | 30392131 |
| Specifications | | |
| Speed Range* 230V | 500 to 2500 rpm | |
| Timer | 1 second to 160 hours | |
| Orbit | 2,5 mm | |
| Controls | Auto/Standby/On Rocker Switch, LED Displays for Speed/Time, Up/Down Buttons for Set-Point Control Pulse Button | |
| Duty Rating | Intermittent duty | |
| Dimensions (L x W x H) | 21,1 x 12,2 x 16,5 cm | |
| Ship Weight | 4,5 kg | |

* Maximum speed will vary depending on accessory used.

Mini Vortex Mixer Accessories

Micro-Tube Holder

Mixes (48) 0,25 to 2 ml micro-tubes.
Requires Insert Retainer.

| Description | Item N° |
|----------------------------|----------|
| Micro-Tube Holder (2 pack) | 30400232 |
| Insert Retainer | 30400227 |



Microplate Holder

Ideal for mixing 96-well plates or deep well blocks.
Requires Insert Retainer.

| Description | Item N° |
|----------------------------|----------|
| Microplate Holder (2 pack) | 30400233 |
| Insert Retainer | 30400227 |



9 to 13 mm Tube Holder

Ideal for mixing 5 ml culture tubes and micro-vials.
Requires Insert Retainer.

| Description | Item N° |
|---------------------------------|----------|
| 9 to 13 mm Tube Holder (2 pack) | 30400229 |
| Insert Retainer | 30400227 |



Flat Foam Insert

Ideal for custom applications. Can be cut or drilled to fit your specifications. Requires Insert Retainer.

| Description | Item N° |
|---------------------------|----------|
| Flat Foam Insert (2 pack) | 30400234 |
| Insert Retainer | 30400227 |



14 to 19 mm Tube Holder

Ideal for mixing up to (8) 15 ml centrifuge tubes.
Requires Insert Retainer.

| Description | Item N° |
|----------------------------------|----------|
| 14 to 19 mm Tube Holder (2 pack) | 30400230 |
| Insert Retainer | 30400227 |



Microwell Kit with Retainer

- Includes:
- 2 Microplate Holders
 - 1 Insert Retainer

| Description | Item N° |
|-----------------------------|----------|
| Microwell Kit with Retainer | 30400199 |



20 to 25 mm Tube Holder

Ideal for mixing up to (8) 50 ml centrifuge tubes.
Requires Insert Retainer.

| Description | Item N° |
|----------------------------------|----------|
| 20 to 25 mm Tube Holder (2 pack) | 30400231 |
| Insert Retainer | 30400227 |



Microtube Kit with /Retainer

- Includes:
- 2 Micro-Tube Holders
 - 1 Insert Retainer

| Description | Item N° |
|------------------------------|----------|
| Microtube Kit with /Retainer | 30400200 |



Vessel Harness

Mixes Erlenmeyer flasks and media bottles.
Requires Insert Retainer.

| Description | Item N° |
|-------------------------|----------|
| Vessel Harness (2 pack) | 30400228 |
| Insert Retainer | 30400227 |



Foam Insert Variety Pack

- Includes:
- (1) 9 to 13 mm Tube Holder
 - (1) 14 to 19 mm Tube Holder
 - (1) 20 to 25 mm Tube Holder
 - 1 Flat Foam Insert

| Description | Item N° |
|--------------------------|----------|
| Foam Insert Variety Pack | 30400201 |



Cup Head

Designed for mixing 1 tube at a time.

| Description | Item N° |
|-------------|----------|
| Cup Head | 30400235 |



Micro-Tube and Microplate Holder Kit

- Includes:
- 1 Micro-Tube Holder
 - 1 Microplate Holder
 - 1 Insert Retainer

| Description | Item N° |
|------------------------------------|----------|
| Micro-Tube & Microplate Holder Kit | 30400198 |



7,6 cm Rubber Head Cover and 7,6 cm Head

Designed for mixing irregular shaped objects.

| Description | Item N° |
|-------------------------------|----------|
| 7,6 cm Rubber Head Cover | 30400237 |
| 7,6 cm Head | 30400236 |
| 7,6 cm Head with Rubber Cover | 30400196 |



Tube Holder Kit

- Includes:
- (1) 9 to 13 mm Tube Holder
 - (1) 14 to 19 mm Tube Holder
 - (1) 20 to 25 mm Tube Holder
 - 1 Flat Foam Insert
 - 2 Vessel Harnesses
 - 1 Insert Retainer

| Description | Item N° |
|-----------------|----------|
| Tube Holder Kit | 30400197 |



Mini Vortex Mixer Accessories

Single Tube Holder

Single tube, hands free mixing. Easily attaches to the top of any Vortex Mixer with the use of a strong magnetic base. Accepts tubes from 6,4 to 11,4 cm in length. Minimum tube diameter of 19 mm.

| Description | Item N° |
|--------------------|----------|
| Single Tube Holder | 30400202 |



Adapter for Vortex-Genie® Mixer*

Adapter plate easily adheres to the Vortex-Genie® Mixer housing so Single Tube Holder (sold separately) can be attached.

| Description | Item N° |
|---------------|----------|
| Adapter plate | 30400203 |



*The Vortex-Genie® Mixer is a registered trademark of Scientific Industries, Inc.

Single Tube Holder Accessories

(Requires Single Tube Holder)

0,5 ml Micro-Tube Holder

Mixes (24) 0,5 ml micro-tubes.
For use with Single Tube Holder.

| Description | Item N° |
|----------------------------|----------|
| Micro-Tube Holder (0,5 ml) | 30400204 |



1,5 ml to 2,0 ml Micro-Tube Holder

Mixes (18) 1,5 to 2 ml micro-tubes.
For use with Single Tube Holder.

| Description | Item N° |
|-------------------------------------|----------|
| Microtube Holder (1,5 ml to 2,0 ml) | 30400205 |



Ampule Tube Holder

Mixes up to 4 storage vials and test tubes.

| Description | Item N° |
|--------------------------------|----------|
| 15 to 17 mm Ampule Tube Holder | 30400207 |
| 10 to 17 mm Ampule Tube Holder | 30400208 |



Stainless Steel Microtube Holder

Mixes up to (12) 1,5 to 2 ml tubes.
Stainless steel construction.

| Description | Item N° |
|------------------|----------|
| Microtube Holder | 30400206 |



Heavy-Duty Vortex Mixers

Increase Productivity with Continuous-Duty Vortexing of Multiple Samples

- Safe to mix at high speeds - the unique locking design of the mixer accessories allows the mixer to safely operate throughout the entire speed range.
- For the most demanding applications, these mixers utilize a high quality German-manufactured motor, allowing for continuous duty operation and increased load capacities up to 1,1 kg.
- Robust digital and non-digital models offer effective speed control from low rpm for gentle shaking to high-speed mixing for vigorous vortexing of difficult samples.



| | |
|------------------------|--|
| Application | ELISA Assays, PCR Preparations, Digestions, Cell Disruptions |
| Display | Independent LED displays for speed/time allow the operator to view both settings simultaneously (digital models) and adjustment knob with dial markings for variable speed control (analog models) |
| Operation | Detachable 3-wire cord and plug (included) |
| Construction | Cyclopol, Touch/Standby/On rocker switch (both models) |
| Design Features | Universal holder, foam insert for (38) 1,5 to 2 ml microtubes, universal cover and cup head (included) |

| Model | Description | Item N° |
|------------------------|--|----------|
| VXHDDG | Digital Heavy Duty Vortex Mixer | 30392136 |
| Specifications | | |
| Speed Range | On Mode 300 to 2500 rpm Touch Mode 300 to 3500 rpm | |
| Timer | 1 second to 160 hours | |
| Orbit | 4,9 mm | |
| Controls | Touch/Standby/On Rocker Switch, LED Displays for Speed/Time, Up/Down Buttons for Set-Point Control | |
| Capacity | 1,1 kg | |
| Duty Rating | Continuous duty | |
| Dimensions (L x W x H) | 24,1 x 16,8 x 16 cm | |
| Ship Weight | 6,8 kg | |

| Model | Description | Item N° |
|------------------------|---|----------|
| VXHDAL | Analog Heavy Duty Vortex Mixer | 30392141 |
| Specifications | | |
| Speed Range | On Mode 300 to 2500 rpm Touch Mode 300 to 3500 rpm | |
| Orbit | 4,9 mm | |
| Controls | Analog | |
| Capacity | 1,1 kg | |
| Duty Rating | Continuous duty | |
| Dimensions (L x W x H) | 24,1 x 16,8 x 16 cm | |
| Ship Weight | 6,8 kg | |

Accessories included in price:

| Description | Item N° |
|-------------------------------------|----------|
| Cup Head | 30400210 |
| Universal Holder | 30400226 |
| Universal Holder Cover | 30400225 |
| Foam Insert (1,5 to 2,0 microtubes) | 30400217 |



30400210



30400226



30400225



30400217

Microplate Vortex Mixers

The Ideal Solution for Dependable Vortex Mixing of Microplates

- Safe to mix at high speeds - the innovative locking design of the microplate accessories allows these mixers to safely operate throughout the entire speed range.
- These mixers utilize a high quality German-manufactured motor allowing for reliable, continuous-duty operation at any speed.
- Robust digital and non-digital models offer effective speed control from low rpm for gentle shaking to high-speed mixing for vigorous vortexing of samples.



| | |
|------------------------|--|
| Application | ELISA Assays, PCR Preparations, Digestions, Cell Disruptions |
| Display | Independent LED displays for speed/time allow the operator to view both settings simultaneously (digital models) and adjustment knob with dial markings for variable speed control (analog models) |
| Operation | Detachable 3-wire cord and plug (included) |
| Construction | Cycloy |
| Design Features | Microplate adapter and cup head (included) |

| Model | Description | Item N° |
|------------------------|--|----------|
| VXMPDG | Digital Microplate Vortex Mixer | 30392150 |
| Specifications | | |
| Speed Range | On Mode 300 to 2500 rpm Touch Mode 300 to 3500 rpm | |
| Timer | 1 second to 160 hours | |
| Orbit | 3,5 mm | |
| Controls | Touch/Standby/On Rocker Switch, LED Displays for Speed/Time, Up/Down Buttons for Set-Point Control | |
| Capacity | 2 microplates | |
| Duty Rating | Continuous duty | |
| Dimensions (L x W x H) | 26,7 x 13,7 x 11,4 cm | |
| Ship Weight | 5,4 kg | |

| Model | Description | Item N° |
|------------------------|---|----------|
| VXMPAL | Analog Microplate Vortex Mixer | 30392155 |
| Specifications | | |
| Speed Range | On Mode 300 to 2500 rpm Touch Mode 300 to 3500 rpm | |
| Orbit | 3,5 mm | |
| Controls | Analog | |
| Capacity | 2 microplates | |
| Duty Rating | Continuous duty | |
| Dimensions (L x W x H) | 26,7 x 13,7 x 11,4 cm | |
| Ship Weight | 5,4 kg | |

Accessories included in price:

| Description | Item N° |
|----------------------------|----------|
| Cup Head | 30400210 |
| Microplate Holder (Single) | 30400215 |



30400210



30400210

Heavy-Duty and Microplate Mixers Accessories

Foam Insert for 0,5 ml Microtubes

Foam insert holds (52) 0,5 ml microtubes.
Requires Universal Holder.

| Description | Item N° |
|-------------------|----------|
| 0,5 ml microtubes | 30400216 |
| Universal Holder | 30400226 |



Foam Insert for 1,5 to 2,0 ml Microtubes

Foam insert holds (38) 1,5 to 2,0 ml microtubes.
Requires Universal Holder.

| Description | Item N° |
|--------------------------|----------|
| 1,5 to 2,0 ml microtubes | 30400217 |
| Universal Holder | 30400226 |



Foam Insert for 12-13 mm Test Tubes

Foam insert holds (34) 12-13 mm diameter test tubes.
Requires Universal Holder.

| Description | Item N° |
|---------------------|----------|
| 12-13 mm test tubes | 30400220 |
| Universal Holder | 30400226 |



Foam Insert for 15-18 mm Test Tubes

Foam insert holds (20) 15-18 mm diameter test tubes. Ideal for 15 ml centrifuge tubes.
Requires Universal Holder.

| Description | Item N° |
|---------------------|----------|
| 15-18 mm test tubes | 30400221 |
| Universal Holder | 30400226 |



Foam Insert for 19-21 mm Test Tubes

Foam insert holds (18) 19-21 mm diameter test tubes.
Requires Universal Holder.

| Description | Item N° |
|---------------------|----------|
| 19-21 mm test tubes | 30400222 |
| Universal Holder | 30400226 |



Foam Insert for 22-25 mm Test Tubes

Foam insert holds (13) 22-25 mm diameter test tubes.
Requires Universal Holder.

| Description | Item N° |
|---------------------|----------|
| 22-25 mm test tubes | 30400223 |
| Universal Holder | 30400226 |



Foam Insert for 26-29 mm Test Tubes

Foam insert holds (4) 26-29 mm diameter test tubes. Ideal for 50 ml centrifuge tubes. Requires Universal Holder.

| Description | Item N° |
|---------------------|----------|
| 26-29 mm test tubes | 30400224 |
| Universal Holder | 30400226 |



Cup Head*

Designed for mixing 1 tube at a time.

| Description | Item N° |
|-------------|----------|
| Cup Head | 30400210 |



Small Vessel Holder

Rubber holder secures 125 and 250 ml Erlenmeyer flasks. Vessel holder also includes a grip mat.
Requires Universal Holder.

| Description | Item N° |
|---------------------|----------|
| Small Vessel Holder | 30400218 |
| Universal Holder | 30400226 |



Large Vessel Holder

Rubber holder secures 500 and 1000 ml Erlenmeyer flasks. Vessel holder also includes a grip mat.
Requires Universal Holder.

| Description | Item N° |
|---------------------|----------|
| Large Vessel Holder | 30400211 |
| Universal Holder | 30400226 |



Microplate Holder (Single)*

Designed to hold one standard microplate.

| Description | Item N° |
|---------------|----------|
| Single Holder | 30400215 |



Microplate Holder (Double)*

Designed to hold two standard microplates.

| Description | Item N° |
|---------------|----------|
| Double Holder | 30400213 |



Microplate Holder (Quad)

Designed to hold four standard microplates.

| Description | Item N° |
|-------------|----------|
| Quad Holder | 30400214 |



Stackable Microplate Holder Four

Designed to maximize the capacity of the Heavy-Duty Vortex Mixer to eight microplates by stacking the tray on top of the four plate holder.

| Description | Item N° |
|------------------|----------|
| Stackable Holder | 30400212 |



Flat Foam Insert

Ideal for custom applications. Can be cut or drilled to fit your specifications. Requires Universal Holder.

| Description | Item N° |
|------------------|----------|
| Flat Foam Insert | 30400209 |
| Universal Holder | 30400226 |



Universal Holder & Cover

Replacement for items supplied with Heavy-Duty Vortex Mixer. Cover allows for mixing irregularly shaped objects.

| Description | Item N° |
|------------------------|----------|
| Universal Holder | 30400226 |
| Universal Holder Cover | 30400225 |



Unless noted with an asterisk (), for use on Heavy-Duty Vortex only.

Multi-Tube Vortex Mixers

Powerful Hands-Free Vortex Mixer for Efficient High-Throughput Mixing

- Easily process up to 50 samples at one time - the Multi-Tube Vortex Mixer can be customized for your application with six different tube racks and a post-extension kit.
- The Multi-Tube Vortex Mixers feature an easy to clean one-piece stainless steel housing that is perfect to use in all environments - especially clean rooms.
- For challenging samples, enhance vortex action & create a more vigorous mix with the programmable pulse mode on the digital models. Adjust the pulse-on/pulse-off time interval to customize operation.



| | |
|---------------------|--|
| Application | Suspensions, Genotyping, High Throughput DNA and RNA Testing in Clinical Labs |
| Display | Independent LED displays for speed/time allow the operator to view both settings simultaneously (digital models) |
| Operation | Detachable 3-wire cord and plug (included) |
| Construction | Stainless steel foam rack for (50) 12 mm diameter tubes (included), interchangeable foam racks for vortexing tubes from 10 - 29 mm in diameter |

| Model | Description | Item N° |
|--------------------------------|----------------------------|----------|
| VXMTAL | Analog Multi-Tube Vortexer | 30392166 |
| Specifications | | |
| Speed Range* | 1200 to 2400 rpm | |
| Timer | 0 to 60 seconds | |
| Orbit | 3,6 mm | |
| Maximum Weight Capacity | 4,5 kg | |
| Duty Rating | Continuous duty | |
| Tray Dimensions (L x W) | 18,4 x 31,1 cm | |
| Overall Dimensions (L x W x H) | 24,1 x 38,4 x 40,6 cm | |
| Ship Weight | 19,1 kg | |

| Model | Description | Item N° |
|--------------------------------|-----------------------------|----------|
| VXMTDG | Digital Multi-Tube Vortexer | 30392173 |
| Specifications | | |
| Speed Range* | 500 to 2500 rpm | |
| Speed Accuracy | ± 25 rpm | |
| Timer | 1 second to 160 hours | |
| Orbit | 3,6 mm | |
| Maximum Weight Capacity | 4,5 kg | |
| Duty Rating | Continuous duty | |
| Tray Dimensions (L x W) | 18,4 x 31,1 cm | |
| Overall Dimensions (L x W x H) | 24,1 x 38,4 x 40,6 cm | |
| Ship Weight | 19,1 kg | |

Accessories included in price:

| Description | Item N° |
|---|----------|
| Foam rack for (50) 12 mm diameter tubes | 30400239 |

* Maximum speed will vary depending on load.

Multi-Tube Vortexer Accessories

Foam Test Tube Racks

| Description | Tube Capacity | Colour | Dimensions (L x W x H) | Item N° |
|--|---------------|--------|------------------------|----------|
| 10 mm Test Tube Foam Rack | 50 | Gray | 14 x 24,1 x 5,1 cm | 30400238 |
| 12 mm Test Tube Foam Rack | 50 | Blue | 14 x 24,1 x 5,1 cm | 30400239 |
| 13 mm Test Tube Foam Rack | 50 | Yellow | 14 x 24,1 x 5,1 cm | 30400240 |
| 16 mm Test Tube Foam Rack (for 15 ml centrifuge tubes) | 50 | Green | 14 x 24,1 x 5,1 cm | 30400241 |
| 25 mm Test Tube Foam Rack | 28 | White | 14 x 24,1 x 5,1 cm | 30400243 |
| 29 mm Test Tube Foam Rack (for 50 ml centrifuge tubes) | 15 | Red | 14 x 24,1 x 5,1 cm | 30400242 |
| Replacement Tray Pad Set (upper & lower) | N/A | Gray | 17,8 x 30,5 x 2,5 cm | 30400245 |

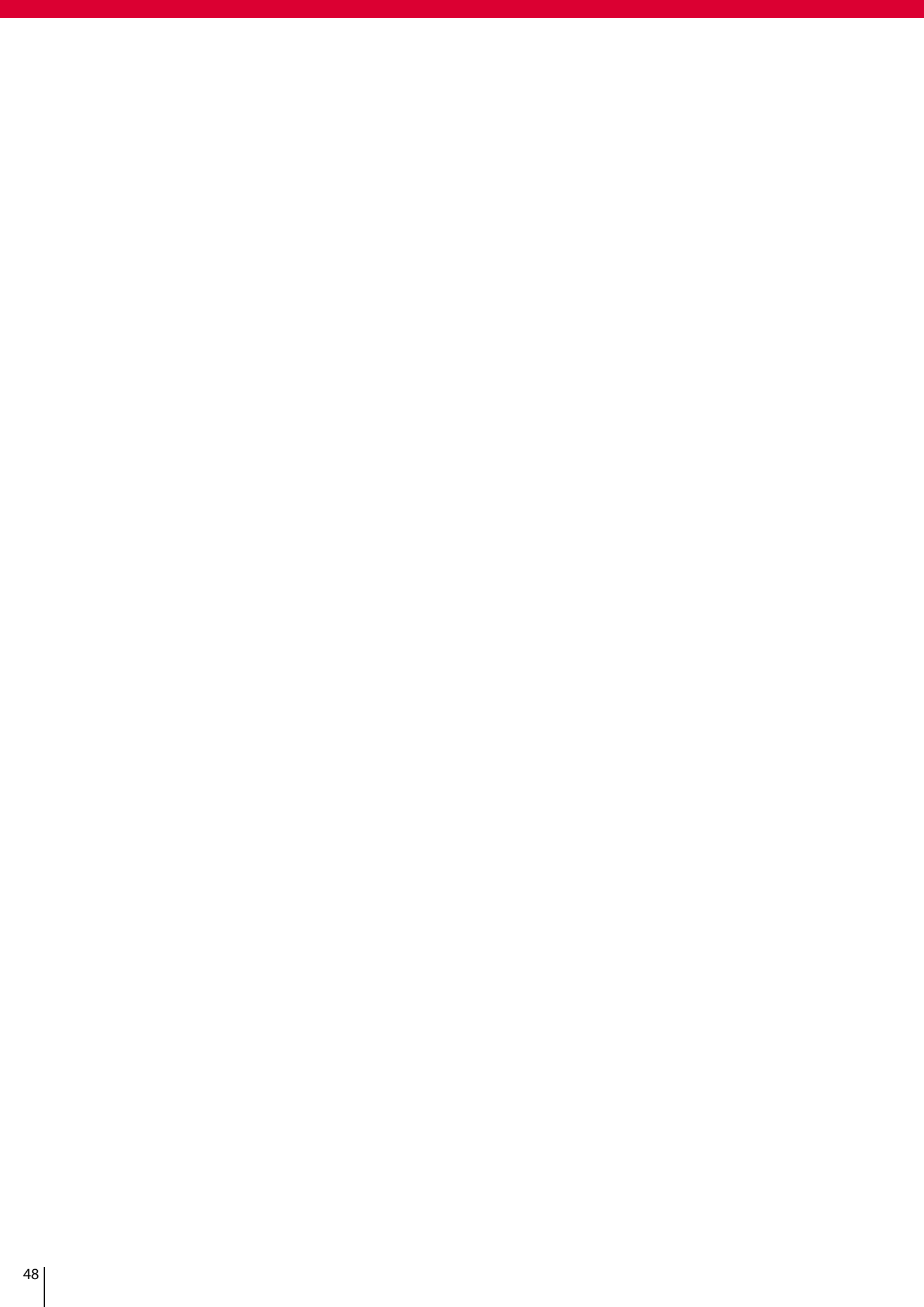


Post Extension Kit

Adds 15,2 cm to the post of the Multi-Tube Vortex Mixer to accommodate tubes up to 25,4 cm tall.

| Description | Item N° |
|--------------------|----------|
| Post Extension Kit | 30400244 |





Dry Block Heaters



Dry Block Heaters
2 Block Dry Block Heaters with Lid

Dry Block Heaters Selection Guide

| | | |
|----------------------------------|---|--|
| Product Family | 1 Block Dry Block Heaters | |
| Model | HB1DG | |
| Number of Blocks | 1 | |
| Temp: Calibration | ● | |
| Temp: Stability | ± 0,1°C | |
| Temp: Range | Ambient + 5°C – 120°C | |
| Temp: Uniformity | ± 0,2°C at 37°C | |
| Working Environment | 18°C – 33°C, 20% – 80% RH, non-condensing | |
| Temperature Overshoot Protection | ● | |
| Heat Up Time to 100°C* | ≤ 16 minutes | |
| Overall Dimensions (L x W x H) | 31,5 x 20,3 x 8,9 cm | |



HB1DG

| | | |
|----------------------------------|---|---|
| Product Family | 2 Block Dry Block Heaters | 2 Block Dry Block Heaters |
| Model | HB2DG | HB2DGHL |
| Number of Blocks | 2 | 2 |
| Temp: Calibration | ● | ● |
| Temp: Stability | ± 0,1°C | ± 0,1°C |
| Temp: Range | Ambient + 5°C – 120°C | Ambient + 5°C – 100°C |
| Temp: Uniformity | ± 0,2°C at 37°C | ± 0,1°C at 37°C |
| Working Environment | 18°C – 33°C, 20% – 80% RH, non-condensing | 18°C – 33°C, 20% – 80% RH, non-condensing |
| Temperature Overshoot Protection | ● | ● |
| Heat Up Time to 100°C* | ≤ 16 minutes | ≤ 30 minutes |
| Overall Dimensions (L x W x H) | 39,1 x 20,3 x 8,9 cm | 39,1 x 20,3 x 17,8 cm |



HB2DG



HB2DGHL

| | | |
|----------------------------------|---|--|
| Product Family | 4 Block Dry Block Heaters | |
| Model | HB4DG | |
| Number of Blocks | 4 | |
| Temp: Calibration | ● | |
| Temp: Stability | ± 0,1°C | |
| Temp: Range | Ambient + 5°C – 120°C | |
| Temp: Uniformity | ± 0,2°C at 37°C | |
| Working Environment | 18°C – 33°C, 20% – 80% RH, non-condensing | |
| Temperature Overshoot Protection | ● | |
| Heat Up Time to 100°C* | ≤ 23 minutes | |
| Overall Dimensions (L x W x H) | 42,9 x 20,3 x 8,9 cm | |



HB4DG

| | | |
|----------------------------------|---|--|
| Product Family | 6 Block Dry Block Heaters | |
| Model | HB6DG | |
| Number of Blocks | 6 | |
| Temp: Calibration | ● | |
| Temp: Stability | ± 2,5°C | |
| Temp: Range | Ambient + 5°C – 120°C | |
| Temp: Uniformity | ± 0,2°C at 37°C | |
| Working Environment | 18°C – 33°C, 20% – 80% RH, non-condensing | |
| Temperature Overshoot Protection | ● | |
| Heat Up Time to 100°C* | ≤ 30 minutes | |
| Overall Dimensions (L x W x H) | 53,1 x 20,3 x 8,9 cm | |



HB6DG

● Yes * Conditions permitting

Dry Block Heaters Selection Guide

| | |
|----------------------------------|--|
| Product Family | 1 Block Dry Block Heaters |
| Model | HB1AL |
| Number of Blocks | 1 |
| Temp: Calibration | - |
| Temp: Stability | ± 1,5°C |
| Temp: Range | High Range: 75°C – 150°C, Low Range: Ambient + 5°C – 100°C |
| Temp: Uniformity | ± 0,2°C at 37°C |
| Working Environment | 18°C – 33°C, 20% – 80% RH, non-condensing |
| Temperature Overshoot Protection | - |
| Heat Up Time | ≤ 16 minutes |
| Overall Dimensions (L x W x H) | 31,5 x 20,3 x 8,9 cm |



HB1AL

| | |
|----------------------------------|--|
| Product Family | 2 Block Dry Block Heaters |
| Model | HB2AL |
| Number of Blocks | 2 |
| Temp: Calibration | - |
| Temp: Stability | ± 2°C |
| Temp: Range | High Range: 75°C – 150°C, Low Range: Ambient + 5°C – 100°C |
| Temp: Uniformity | ± 0,2°C at 37°C |
| Working Environment | 18°C – 33°C, 20% – 80% RH, non-condensing |
| Temperature Overshoot Protection | - |
| Heat Up Time to 100°C* | ≤ 16 minutes |
| Overall Dimensions (L x W x H) | 39,1 x 20,3 x 8,9 cm |



HB2AL

| | |
|----------------------------------|--|
| Product Family | 4 Block Dry Block Heaters |
| Model | HB4AL |
| Number of Blocks | 4 |
| Temp: Calibration | - |
| Temp: Stability | ± 2,5°C |
| Temp: Range | High Range: 75°C – 150°C, Low Range: Ambient + 5°C – 100°C |
| Temp: Uniformity | ± 0,2°C at 37°C |
| Working Environment | 18°C – 33°C, 20% – 80% RH, non-condensing |
| Temperature Overshoot Protection | - |
| Heat Up Time to 100°C* | ≤ 23 minutes |
| Overall Dimensions (L x W x H) | 42,9 x 20,3 x 8,9 cm |



HB4AL

| | |
|----------------------------------|--|
| Product Family | 6 Block Dry Block Heaters |
| Model | HB6AL |
| Number of Blocks | 6 |
| Temp: Calibration | - |
| Temp: Stability | ± 2,5°C |
| Temp: Range | High Range: 75°C – 150°C, Low Range: Ambient + 5°C – 100°C |
| Temp: Uniformity | ± 0,2°C at 37°C |
| Working Environment | 18°C – 33°C, 20% – 80% RH, non-condensing |
| Temperature Overshoot Protection | - |
| Heat Up Time to 100°C* | ≤ 30 minutes |
| Overall Dimensions (L x W x H) | 53,1 x 20,3 x 8,9 cm |



HB6AL

* Conditions permitting

1 Block Dry Block Heaters

Versatile Block Heaters Designed for Everyday Use with Accessories for Every Application

- Designed for reliable everyday use in the lab. Digital and non-digital Block Heaters offer exceptional temperature uniformity with outstanding temperature stability.
- Ensure temperature accuracy. Digital models include a unique single point calibration feature to match the block heater's display to a known external temperature standard for 3 temperature setpoints.
- Digital models feature easy to use touchpad controls with independent displays for temperature and time. Robust non-digital models are controlled with dual temperature adjustment knobs.



| | |
|------------------------|--|
| Application | Incubation & Activation of Cultures, Enzyme Reactions, Immunoassays, Melting/Boiling Points, Isothermal Incubations, Nucleic Acid Denaturation |
| Display | LED display (digital models) and dual-adjustment knobs with dial markings (analog models) |
| Operation | Detachable 3-wire cord and plug (included), analog models require an external thermometer or temperature device for temperature setpoint |
| Construction | Painted steel housing, support rod holder with locking knob |
| Design Features | Touchpad control and audible alarm (digital models) |

| Model | Size | Control | Temperature Range | Uniformity Within the Block @ 37°C | Temperature Stability @ 37°C | Uniformity Across Similar Blocks @ 37°C | Heat-Up Time to 100°C* | Dimensions (L x W x H) | Item N° |
|-------|---------|---------|---|------------------------------------|------------------------------|---|------------------------|------------------------|----------|
| HB1DG | 1 block | Digital | Ambient +5°C to 120°C | 230 volt units: ± 0,2°C | 230 volt units: ± 0,2°C | N/A | ≤ 16 minutes | 31,5 × 20,3 × 8,9 cm | 30392061 |
| HB1AL | 1 block | Analog | Low Range: Ambient +5°C to 100°C High Range: 75°C to 150°C | 230 volt units: ± 0,2°C | 230 volt units: ± 1,5°C | N/A | ≤ 16 minutes | 31,5 × 20,3 × 8,9 cm | 30392047 |

All optional accessories can be found on pages 56-59

* Conditions permitting

2 Block Dry Block Heaters

Versatile Block Heaters Designed for Everyday Use with Accessories for Every Application

- Three models to customize your application. All models offer exceptional temperature uniformity with outstanding temperature stability.
- Avoid contamination to ensure repeatable, reliable results. The Heatblock with Heated Lid features a second heater in the lid to minimize condensation to maintain your sample integrity.

| | |
|------------------------|---|
| Application | Incubation & Activation of Cultures, Enzyme Reactions, Immunoassays, Melting/ Boiling Points, Isothermal Incubations, Nucleic Acid Denaturation |
| Display | LED display (digital models) and dual-adjustment knobs with dial markings (analog models) |
| Operation | Detachable 3-wire cord and plug (included), analog models require an external thermometer or temperature device for temperature setpoint |
| Construction | Painted steel housing, support rod holder with locking knob |
| Design Features | Touchpad control and audible alarm (digital models) |



| Model | Size | Control | Temperature Range | Uniformity Within the Block @ 37°C | Temperature Stability @ 37°C | Uniformity Across Similar Blocks @ 37°C | Heat-Up Time to 100°C* | Dimensions (L x W x H) | Item N° |
|---------|---------|---------|---|------------------------------------|------------------------------|---|------------------------|------------------------|----------|
| HB2DG | 2 block | Digital | Ambient +5°C to 120°C | 230 volt units: ± 0,2°C | 230 volt units: ± 0,2°C | ± 0,1°C | ≤ 16 minutes | 39,1 × 20,3 × 8,9 cm | 30392082 |
| HB2DGHL | 2 block | Digital | Ambient +5°C to 100°C | 230 volt units: ± 0,1°C | 230 volt units: ± 0,2°C | ± 0,2°C | ≤ 30 minutes | 39,1 × 20,3 × 17,8 cm | 30392103 |
| HB2AL | 2 block | Analog | Low Range: Ambient +5°C to 100°C High Range: 75°C to 150°C | 230 volt units: ± 0,2°C | 230 volt units: ± 2,0°C | ± 0,1°C | ≤ 16 minutes | 39,1 × 20,3 × 8,9 cm | 30392054 |

4 Block Dry Block Heaters

Versatile and Dependable Block Heaters Deliver Precise, Reliable Results

- Designed for flexibility with your applications. The four-block capacity allows you to process multiple samples simultaneously with one device.
- Ensure temperature accuracy. Digital models include a unique single point calibration feature to match the block heater's display to a known external temperature standard for 3 temperature setpoints.
- Digital models feature easy to use touchpad controls with independent displays for temperature and time. Robust non-digital models are controlled with dual temperature adjustment knobs.



| | |
|------------------------|--|
| Application | Incubation & Activation of Cultures, Enzyme Reactions, Immunoassays, Melting/Boiling Points, Isothermal Incubations, Nucleic Acid Denaturation |
| Display | LED display (digital models) and dual-adjustment knobs with dial markings (analog models) |
| Operation | Detachable 3-wire cord and plug (included), analog models require an external thermometer or temperature device for temperature setpoint |
| Construction | Detachable 3-wire cord and plug (included), analog models require an external thermometer or temperature device for temperature setpoint |
| Design Features | Touchpad control and audible alarm (digital models) |

| Model | Size | Control | Temperature Range | Uniformity Within the Block @ 37°C | Temperature Stability @ 37°C | Uniformity Across Similar Blocks @ 37°C | Heat-Up Time to 100°C* | Dimensions (L x W x H) | Item N° |
|-------|---------|---------|---|------------------------------------|------------------------------|---|------------------------|------------------------|----------|
| HB4DG | 4 block | Digital | Ambient +5°C to 120°C | 230 volt units: ± 0,2°C | 230 volt units: ± 0,2°C | ± 0,2°C | ≤ 23 minutes | 42,9 × 20,3 × 8,9 cm | 30392089 |
| HB4AL | 4 block | Analog | Low Range: Ambient +5°C to 100°C High Range: 75°C to 150°C | 230 volt units: ± 0,2°C | 230 volt units: ± 2,5°C | ± 0,2°C | ≤ 23 minutes | 42,9 × 20,3 × 8,9 cm | 30392068 |

All optional accessories can be found on pages 56-59

* Conditions permitting

6 Block Dry Block Heaters

Process More Samples with Large Capacity Block Heaters that Deliver Precise, Reliable Results

- Unique design for high throughput applications. The six-block capacity allows you the most flexibility to process multiple samples simultaneously with one device.
- Ensure temperature accuracy. Digital models include a unique single point calibration feature to match the block heater's display to a known external temperature standard for 3 temperature setpoints.
- Digital models feature easy to use touchpad controls with independent displays for temperature and time. Robust non-digital models are controlled with dual temperature adjustment knobs.



| | |
|------------------------|---|
| Application | Incubation & Activation of Cultures, Enzyme Reactions, Immunoassays, Melting/ Boiling Points, Isothermal Incubations, Nucleic Acid Denaturation |
| Display | LED display (digital models) and dual-adjustment knobs with dial markings (analog models) |
| Operation | Detachable 3-wire cord and plug (included), analog models require an external thermometer or temperature device for temperature setpoint |
| Construction | Painted steel housing, support rod holder with locking knob |
| Design Features | Touchpad control and audible alarm (digital models) |

| Model | Size | Control | Temperature Range | Uniformity Within the Block @ 37°C | Temperature Stability @ 37°C | Uniformity Across Similar Blocks @ 37°C | Heat-Up Time to 100°C* | Dimensions (L x W x H) | Item N° |
|-------|---------|---------|---|------------------------------------|------------------------------|---|------------------------|------------------------|----------|
| HB6DG | 6 block | Digital | Ambient +5°C to 120°C | 230 volt units: ± 0,2°C | 230 volt units: ± 0,2°C | ± 0,3°C | ≤ 30 minutes | 53,1 × 20,3 × 8,9 cm | 30392096 |
| HB6AL | 6 block | Analog | Low Range: Ambient +5°C to 100°C High Range: 75°C to 150°C | 230 volt units: ± 0,2°C | 230 volt units: ± 2,5°C | ± 0,3°C | ≤ 30 minutes | 53,1 × 20,3 × 8,9 cm | 30392075 |

Modular Blocks* & Accessories

Modular blocks are constructed from a solid anodized aluminium block*. The close contact of tubes-to-block walls allow for maximum heat retention. Each block has a thermometer well for measuring block temperature.

CAUTION! To avoid possible electrical hazard, do not fill well or block with water or other fluids. Units are designed as a dry bath/incubator.

Single block dimensions (L × W × H): 9,5 × 7,6 × 5,1 cm

Double block dimensions (L × W × H): 15,2 × 9,5 × 5,7 cm

Microcentrifuge Tube Blocks

Single block

| Brand/Sample Type | No. of Wells | Well Dia. | Well Depth | Item N° |
|------------------------|--------------|-----------|------------|----------|
| 0,5 ml Tube | 30 | 7,9 mm | 27,6 mm | 30400157 |
| 1,5 ml Tube | 20 | 11,1 mm | 39,1 mm | 30400159 |
| 1,5 ml Eppendorf™ Tube | 20 | 11,5 mm | 36,9 mm | 30400162 |
| 2 ml Eppendorf™ Tube | 20 | 11,5 mm | 38,1 mm | 30400191 |
| 2 ml Corning™ Tube | 20 | 10,9 mm | 38,1 mm | 30400192 |

Titer Plate Block

Double block

Fits 2/4/6 block Dry Block Heaters. Ideal for 96-well or 384-well titer plates. Recessed well for better stability, flat surface good for flat and round bottom plates.

| Sample Type | Well Depth | Item N° |
|-------------|------------|----------|
| Titer Plate | 13,5 mm | 30400164 |

Conical-Bottom Centrifuge Tube Blocks

| Single/Sample Type | No. of Wells | Well Dia. | Well Depth | Item N° |
|--------------------|--------------|-----------|------------|----------|
| 15 ml Tube | 12 | 17,1 mm | 44,5 mm | 30400172 |
| 50 ml Tube | 5 | 29,0 mm | 47,6 mm | 30400168 |

Standard Test Tube Blocks

| Single/Sample Type | No. of Wells | Well Dia. | Well Depth | Item N° |
|--------------------|--------------|-----------|------------|----------|
| 6 mm Tube | 30 | 8,3 mm | 48,4 mm | 30400158 |
| 10 mm Tube | 24 | 10,7 mm | 48,4 mm | 30400151 |
| 12/13 mm Tube | 20 | 13,9 mm | 48,4 mm | 30400152 |
| 12/13 mm Tube | 16 | 13,9 mm | 48,4 mm | 30400165 |
| 15/16 mm Tube | 12 | 17,5 mm | 48,4 mm | 30400153 |
| 17/18 mm Tube | 12 | 19,1 mm | 48,4 mm | 30400195 |
| 20 mm Tube | 8 | 21,0 mm | 48,4 mm | 30400154 |
| 25 mm Tube | 6 | 26,2 mm | 48,4 mm | 30400155 |
| 35 mm Tube | 4 | 35,0 mm | 47,6 mm | 30400167 |



* Block colour subject to change.

Modular Blocks* & Accessories

Combination Blocks

Single block

These blocks have been designed for variable sized samples.

| Sample Type | No. of Wells | Well Dia. | Well Depth | Item N° |
|-----------------------------|--------------|-----------|------------|----------|
| Test Tube Combination | 6 mm | 6 | 8,3 mm | 30400156 |
| | 12/13 mm | 5 | 13,8 mm | |
| | 25 mm | 3 | 26,2 mm | |
| Centrifuge Tube Combination | 1,5 ml | 4 | 11,1 mm | 30400193 |
| | 15 ml | 3 | 17,1 mm | |
| | 50 ml | 2 | 29,0 mm | |
| Micro-Tube Combination | 0,5 ml | 6 | 7,9 mm | 30400194 |
| | 1,5 ml | 10 | 11,1 mm | |
| | 2 ml | 5 | 11,5 mm | |



Vial Blocks

Single block

Designed for sample/serum and scintillation vials.

| Sample Type | No. of Wells | Well Dia. | Well Depth | Item N° |
|-------------|--------------|-----------|------------|----------|
| 12 mm Vial | 20 | 12,7 mm | 30 mm | 30400182 |
| 15 mm Vial | 20 | 15,8 mm | 35 mm | 30400183 |
| 16 mm Vial | 15 | 16,4 mm | 45 mm | 30400190 |
| 17 mm Vial | 12 | 17,8 mm | 45 mm | 30400184 |
| 19 mm Vial | 12 | 19,7 mm | 45 mm | 30400185 |
| 21 mm Vial | 9 | 21,7 mm | 45 mm | 30400186 |
| 23 mm Vial | 8 | 23,8 mm | 45 mm | 30400187 |
| 25 mm Vial | 8 | 25,8 mm | 45 mm | 30400188 |
| 28 mm Vial | 6 | 28,8 mm | 45 mm | 30400189 |



PCR—Plate, Tube, Strip Blocks

Single and double block

Tapered tube wells for 0,2 ml tubes. Spaced for easy access and removal.

| Sample Type | Block Size | No. of Wells | Well Dia. | Well Depth | Item N° |
|--------------------|------------|--------------|-----------|------------|----------|
| 96-well PCR Plate | Double | 96 | 6,4 mm | 15,5 mm | 30400171 |
| 10 × 8 Tube Strips | Single | 80 | 6,4 mm | 15,5 mm | 30400169 |
| Individual Tubes | Single | 64 | 6,4 mm | 20,2 mm | 30400170 |



Cuvette Block

Single block

Two parallel slots fit 6 cuvettes in each slot, side-by-side.

| Sample Type | No. of Wells | Well Depth | Item N° |
|-----------------------|--------------|------------|----------|
| (12) 12,5 mm Cuvettes | 2 | 25,4 mm | 30400161 |



* Block colour subject to change.

Modular Blocks* & Accessories

Solid Blocks

Single and double block

For use as a low-temperature hotplate, slide drying, or for custom drilling to make a custom block.

| Block Size | Dimensions (L x W x H) | Item N° |
|------------|------------------------|----------|
| Single | 9,5 x 7,6 x 5,1 cm | 30400160 |
| Double | 15,2 x 9,5 x 5,7 cm | 30400166 |



Stainless Steel Sand Baths

Ideal for irregular vessels. Stainless steel construction for superior corrosion resistance. Designed to hold sand, stainless steel shot or non-volatile fluids.

| For Unit | Dimensions (L x W x H) | Item N° |
|--------------------------|------------------------|----------|
| 1 Block Dry Block Heater | 9,5 x 7,6 x 6,4 cm | 30400173 |
| 2 Block Dry Block Heater | 9,5 x 14,9 x 6,4 cm | 30400174 |
| 4 Block Dry Block Heater | 14,7 x 19,1 x 6,4 cm | 30400175 |
| 6 Block Dry Block Heater | 14,7 x 28,7 x 6,4 cm | 30400176 |

| Accessories | Item N° |
|-------------------------------|----------|
| Sand, 0,45 kg | 30400177 |
| Stainless Steel Shot, 0,45 kg | 30400178 |



Low Temperature Covers

Plexiglass cover reduces air flow for additional temperature stability in low-temperature applications. Two sides are open 6,4 mm.

| Block Size | Dimensions (L x W x H) | Item N° |
|---------------|------------------------|----------|
| 2 Block Cover | 16,5 x 16,5 x 4,1 cm | 30400179 |
| 4 Block Cover | 21,6 x 21,6 x 4,1 cm | 30400180 |
| 6 Block Cover | 31,8 x 21,6 x 4,1 cm | 30400181 |



* Block colour subject to change

Modular Blocks* & Accessories

External Temperature Probe Kit

Enables the unit to read actual block or sample temperature and display that temperature on the control panel. The optional External Temperature Probe Kit includes a stainless steel RTD PT100 probe, 45,7 cm stainless steel support rod, thermometer/temperature probe extension clamp and hook connector. The PT100 RTD probe is designed to fit perfectly in to the thermometer well of each modular block.



| Description | Item N° |
|---|----------|
| Optional External Temperature Probe Kit | 30400246 |



Hotplates & Stirrers



*Guardian Hotplate Stirrers
Mini Hotplates & Stirrers*

Hotplates & Stirrers Selection Guide



| Product Family | Guardian 7000 | Guardian 7000 | Guardian 7000 |
|--------------------|---------------------------------|---------------------------------|---------------------------------|
| Function | Heating and Stirring | Heating and Stirring | Heating and Stirring |
| Model | e-G71HS07C | e-G71HS10C | e-G71HSRDM |
| Capacity | 15 L | 18 L | 20 L |
| Control | Digital | Digital | Digital |
| Top Plate Material | Ceramic | Ceramic | Aluminium |
| Speed Range | 60 to 1600 rpm | 60 to 1600 rpm | 60 to 1600 rpm |
| Temp. Range | Ambient + 5°C – 500°C | Ambient + 5°C – 500°C | Ambient + 5°C – 380°C |
| Timer | 1 minute – 99 hours, 59 minutes | 1 minute – 99 hours, 59 minutes | 1 minute – 99 hours, 59 minutes |
| Plate Size (L x W) | 17,8 x 17,8 cm | 25,4 x 25,4 cm | round 13,5 cm |



| Product Family | Guardian 5000 | Guardian 5000 | Guardian 5000 | Guardian 5000 | Guardian 5000 |
|--------------------|-----------------------|-----------------------|----------------|-----------------------|-----------------------|
| Function | Heating and Stirring | Heating | Stirring | Heating and Stirring | Heating and Stirring |
| Model | e-G51HS07C | e-G51HP07C | e-G51ST07C | e-G51HS10C | e-G51HSRDM |
| Capacity | 15 L | 15 L | 15 L | 18 L | 20 L |
| Control | Digital | Digital | Digital | Digital | Digital |
| Top Plate Material | Ceramic | Ceramic | Ceramic | Ceramic | Aluminium |
| Speed Range | 60 to 1600 rpm | – | 60 to 1600 rpm | 60 to 1600 rpm | 60 to 1600 rpm |
| Temp. Range | Ambient + 5°C – 500°C | Ambient + 5°C – 500°C | – | Ambient + 5°C – 500°C | Ambient + 5°C – 380°C |
| Plate Size (L x W) | 17,8 x 17,8 cm | 17,8 x 17,8 cm | 17,8 x 17,8 cm | 25,4 x 25,4 cm | round 13,5 cm |

Hotplates & Stirrers Selection Guide



| Product Family | Mini Hotplates & Stirrers | Mini Hotplates & Stirrers | Mini Hotplates & Stirrers |
|--------------------------------|---------------------------|---------------------------|---------------------------|
| Function | Heating and Stirring | Heating | Heating |
| Model | HSMNHS4CAL | HSMNHP4CAL | HSMNHP4CFT |
| Capacity | 1 L | 1 L | 1 L |
| Control | Analog | Analog | Analog |
| Top Plate Material | Ceramic | Ceramic | Ceramic |
| Speed Range | 100 rpm – 1200 rpm | – | – |
| Temp. Range | to 500°C | to 500°C* | fixed temp. of 500°C |
| Plate Size (L x W) | 10,2 x 10,2 cm | 10,2 x 10,2 cm | 10,2 x 10,2 cm |
| Overall Dimensions (L x W x H) | 20,1 x 15,2 x 12,7 cm | 20,1 x 15,2 x 12,7 cm | 20,1 x 15,2 x 12,7 cm |
| Ship Weight | 1,8 kg | 1,8 kg | 1,8 kg |

* Fixed Temperature Hotplate has a fixed temperature of 500°C.



| Product Family | Mini Hotplates & Stirrers | Mini Hotplates & Stirrers |
|--------------------------------|---------------------------|---------------------------|
| Function | Stirring | Stirring, Auto Start/Stop |
| Model | HSMNST4CAL | HSMNAS4CAL |
| Capacity | 1 L | 1 L |
| Control | Analog | Analog |
| Top Plate Material | Ceramic | Ceramic |
| Speed Range | 100 rpm – 1200 rpm | 100 rpm – 1200 rpm |
| Temp. Range | – | – |
| Plate Size (L x W) | 10,2 x 10,2 cm | 10,2 x 10,2 cm |
| Overall Dimensions (L x W x H) | 20,1 x 15,2 x 12,7 cm | 20,1 x 15,2 x 12,7 cm |
| Ship Weight | 1,8 kg | 1,8 kg |

Guardian 7000

Dependable Hotplate Stirrers with Superior Safety Features and Intelligent Performance

- Protect your lab with patented SmartPresence™ technology! This exclusive state-of-the-art technology can recognize a user nearby and if no one is detected the heating function will safely shut off.
- Safely control maximum temperature! The SmartHeat™ feature allows you to set the maximum temperature of the hotplate stirrer preventing overheating of sensitive samples keeping the user & sample safe.
- Safeguard operators! The SmartHousing™ remains cool to the touch at all temperature settings. The large hot top light can be seen across the lab and illuminates when the heater is above 40°C.



| | |
|------------------------|---|
| Application | Temperature Sensitive Chemistry & Biology, Heat Fixation, Solution pH Optimization, Solution Sterilization, Endothermic Reactions, Denaturing of Organic Material, Sample & Solution Preparation |
| Display | Backlit LCD Display for temperature, speed and time, green indicator lights when unit is heating and stirring, two prominent hot top indicator lights |
| Operation | Timer, Stirring from 60 to 1600 rpm, Temperature range of ambient +5°C to 500°C (ceramic top) or 380°C (aluminium top), power cord (included), 20.3 cm stainless steel RTD temperature probe, 3.8 cm PTFE coated stir bar, in-use cover |
| Construction | Probe connection, SmartHousing™ stays cool to the touch and is chemical resistant, IP21 Ingress Protection, hardened glass front panel, control knobs, On/Off switch for heater disconnect, built-in support rod holder, easy to clean ceramic or aluminium tops |
| Communication | USB port provides flexibility for programming of repeat applications and enhancing safety with SmartLink™ technology; the long range user detection function operated with the Ohaus Bluetooth dongle accessory (sold separately) |
| Design Features | Hot top indicator lights, audible alarm, SmartHeat™ temperature limiting function, SafetyHeat™ shuts off heater in the event of malfunction, temperature calibration feature for 5 probe & 5 plate setpoints, temperature priority function, SmartRate™ functions |

| Model | Description | Item N° |
|-------------------------|---|----------|
| e-G71HS07C | Hotplate-Stirrer e-G71HS07C 230V EU | 30500603 |
| Specifications | | |
| Temperature Range | Ambient + 5°C – 500°C | |
| Speed Range | 60 to 1600 rpm | |
| Timer | 1 minute – 99 hours, 59 minutes | |
| Capacity | 15 L | |
| Top Plate Material | Ceramic | |
| Top Plate Dimensions | 17,8 x 17,8 cm | |
| Temperature Probe | Pt1000 | |
| Temperature Calibration | Temperature Calibration 5 Plate/5 Probe | |

| Model | Description | Item N° |
|-------------------------|---|----------|
| e-G71HS10C | Hotplate-Stirrer e-G71HS10C 230V EU | 30500613 |
| Specifications | | |
| Temperature Range | Ambient + 5°C – 500°C | |
| Speed Range | 60 to 1600 rpm | |
| Timer | 1 minute – 99 hours, 59 minutes | |
| Capacity | 18 L | |
| Top Plate Material | Ceramic | |
| Top Plate Dimensions | 25,4 x 25,4 cm | |
| Temperature Probe | Pt1000 | |
| Temperature Calibration | Temperature Calibration 5 Plate/5 Probe | |

| Model | Description | Item N° |
|-------------------------|---|----------|
| e-G71HSRDM | Hotplate-Stirrer e-G71HSRDM 230V EU | 30500623 |
| Specifications | | |
| Temperature Range | Ambient + 5°C – 380°C | |
| Speed Range | 60 to 1600 rpm | |
| Timer | 1 minute – 99 hours, 59 minutes | |
| Capacity | 20 L | |
| Top Plate Material | Aluminium | |
| Top Plate Dimensions | round 13,5 cm | |
| Temperature Probe | Pt1000 | |
| Temperature Calibration | Temperature Calibration 5 Plate/5 Probe | |

Product will be available in Q1 2020.

Accessories

| Material description | Item No. |
|---------------------------------------|----------|
| Base Plate, 135 mm | 30500570 |
| Handles, for Base Plate | 30500571 |
| Sectional Block, 12 mm Vials | 30500572 |
| Sectional Block, 15 mm vials | 30500573 |
| Sectional Block, 17 mm Vials | 30500574 |
| Sectional Block, 21 mm Vials | 30500575 |
| Sectional Block, 28 mm Vials | 30500576 |
| Sectional Block, 12 mm Test Tubes | 30500577 |
| Sectional Block, 16 mm Test Tubes | 30500578 |
| Sectional Block, 20 mm Test Tubes | 30500579 |
| Sectional Block, 25 mm Test Tubes | 30500580 |
| Uni Block, 12 mm Vials | 30500581 |
| Uni Block, 15 mm vials | 30500582 |
| Uni Block, 17 mm Vials | 30500583 |
| Uni Block, 21 mm Vials | 30500584 |
| Uni Block, 28 mm Vials | 30500585 |
| Uni Block, 12 mm Test Tubes | 30500586 |
| Uni Block, 16 mm Test Tubes | 30500587 |
| Uni Block, 20 mm Test Tubes | 30500588 |
| Uni Block, 25 mm Test Tubes | 30500589 |
| Temperature Probe 20 cm S/S | 30500590 |
| Temperature Probe 20 cm PTFE | 30500591 |
| Temperature Probe 25 cm S/S | 30500592 |
| Temperature Probe 25 cm PTFE | 30500593 |
| In Use Cover Guardian 7x7 | 30500594 |
| In Use Cover Guardian 10x10 | 30500595 |
| In Use Cover Guardian Round | 30500596 |
| Vessel Clamp | 30500597 |
| Clamp, Specialty, Nester, CLS-NESTXS | 30392318 |
| Clamp, Specialty, Column, CLS-COLMNSL | 30392316 |
| Clamp, Specialty, Column, CLS-COLMNSM | 30392315 |
| Clamp, Specialty, Column, CLS-COLMNSS | 30392314 |
| Clamp, Specialty, Column, CLS-COLMNSX | 30392317 |
| Ultra Flex Support Kit | 30400145 |
| Support Rod And Clamp Kit | 30400146 |
| Spinbar 2.5 cm PTFE | 30400147 |
| Spinbar 3.8 cm PTFE | 30400148 |
| Spinbar 7 cm PTFE | 30400149 |
| Spinbar 10 cm with Pivot Ring PTFE | 30400150 |

Guardian 5000

Reliable Hotplate Stirrers with Exceptional Safety Features for Everyday Use

- Safeguard operators! The SmartHousing™ remains cool to the touch at all temperature settings. The large hot top light can be seen across the lab and illuminates when the heater is above 40°C.
- All sizes feature the exclusive SafetyHeat™; an industry leading internal protection system that assures safety in heating applications with dual monitoring of system health to protect the lab.
- The unique SmartHousing™ stays cool to the touch and is chemical resistant. The easy to clean innovative design channels spills away from internal components and the chemical resistant control panel



| | |
|------------------------|---|
| Application | Boiling Water, Water/Oil Bath Preparation, Sample and Solution Preparation, Dissolving Buffers and Reagents, Preparing Media, Concentrating Samples |
| Display | Backlit LCD Display for temperature and speed, green indicator lights when unit is heating and stirring, prominent hot top indicator light, probe in use icon, Single Point Calibration icon |
| Operation | Stirring from 60 to 1600 rpm, Temperature range of ambient +5°C to 500°C (ceramic top) or 380°C (aluminium top), power cord (included), stirring models include a 3.8 cm PTFE coated stir bar |
| Construction | Probe connection, SmartHousing™ stays cool to the touch and is chemical resistant, IP21 Ingress Protection, polycarbonate front panel, control knobs, On/Off switch for heater disconnect, built-in support rod holder, easy to clean ceramic or aluminium tops |
| Design Features | Hot top indicator light, audible alarm, SafetyHeat™ protection shuts off the heater in the event of a malfunction, temperature calibration feature for 3 probe and 3 plate setpoints |

| Model | Description | Item N° |
|-------------------------|---|----------|
| e-G51HS07C | Hotplate-Stirrer e-G51HS07C 230V EU | 30500523 |
| Specifications | | |
| Temperature Range | Ambient + 5°C – 500°C | |
| Speed Range | 60 to 1600 rpm | |
| Capacity | 15 L | |
| Top Plate Material | Ceramic | |
| Top Plate Dimensions | 17,8 × 17,8 cm | |
| Temperature Probe | Available as an Accessory | |
| Temperature Calibration | Temperature Calibration 3 Plate/3 Probe | |

| Model | Description | Item N° |
|-----------------------|----------------------------|----------|
| e-G51ST07C | Stirrer e-G51ST07C 230V EU | 30500543 |
| Specifications | | |
| Speed Range | 60 to 1600 rpm | |
| Capacity | 15 L | |
| Top Plate Material | Ceramic | |
| Top Plate Dimensions | 17,8 × 17,8 cm | |
| Temperature Probe | Available as an Accessory | |

| Model | Description | Item N° |
|-------------------------|---|----------|
| e-G51HSRDM | Hotplate-Stirrer e-G51HSRDM 230V EU | 30500563 |
| Specifications | | |
| Temperature Range | Ambient + 5°C – 380°C | |
| Speed Range | 60 to 1600 rpm | |
| Capacity | 20 L | |
| Top Plate Material | Aluminium | |
| Top Plate Dimensions | round 13,5 cm | |
| Temperature Probe | Available as an Accessory | |
| Temperature Calibration | Temperature Calibration 3 Plate/3 Probe | |

| Model | Description | Item N° |
|-------------------------|---|----------|
| e-G51HP07C | Hotplate e-G51HP07C 230V EU | 30500533 |
| Specifications | | |
| Temperature Range | Ambient + 5°C – 500°C | |
| Capacity | 15 L | |
| Top Plate Material | Ceramic | |
| Top Plate Dimensions | 17,8 × 17,8 cm | |
| Temperature Probe | Available as an Accessory | |
| Temperature Calibration | Temperature Calibration 3 Plate/3 Probe | |

| Model | Description | Item N° |
|-------------------------|---|----------|
| e-G51HS10C | Hotplate-Stirrer e-G51HS10C 230V EU | 30500553 |
| Specifications | | |
| Temperature Range | Ambient + 5°C – 500°C | |
| Speed Range | 60 to 1600 rpm | |
| Capacity | 18 L | |
| Top Plate Material | Ceramic | |
| Top Plate Dimensions | 25,4 × 25,4 cm | |
| Temperature Probe | Available as an Accessory | |
| Temperature Calibration | Temperature Calibration 3 Plate/3 Probe | |

Product will be available in Q1 2020.

Accessories

| Material description | Item No. |
|---------------------------------------|----------|
| Base Plate, 135 mm | 30500570 |
| Handles, for Base Plate | 30500571 |
| Sectional Block, 12 mm Vials | 30500572 |
| Sectional Block, 15 mm vials | 30500573 |
| Sectional Block, 17 mm Vials | 30500574 |
| Sectional Block, 21 mm Vials | 30500575 |
| Sectional Block, 28 mm Vials | 30500576 |
| Sectional Block, 12 mm Test Tubes | 30500577 |
| Sectional Block, 16 mm Test Tubes | 30500578 |
| Sectional Block, 20 mm Test Tubes | 30500579 |
| Sectional Block, 25 mm Test Tubes | 30500580 |
| Uni Block, 12 mm Vials | 30500581 |
| Uni Block, 15 mm vials | 30500582 |
| Uni Block, 17 mm Vials | 30500583 |
| Uni Block, 21 mm Vials | 30500584 |
| Uni Block, 28 mm Vials | 30500585 |
| Uni Block, 12 mm Test Tubes | 30500586 |
| Uni Block, 16 mm Test Tubes | 30500587 |
| Uni Block, 20 mm Test Tubes | 30500588 |
| Uni Block, 25 mm Test Tubes | 30500589 |
| Temperature Probe 20 cm S/S | 30500590 |
| Temperature Probe 20 cm PTFE | 30500591 |
| Temperature Probe 25 cm S/S | 30500592 |
| Temperature Probe 25 cm PTFE | 30500593 |
| In Use Cover Guardian 7x7 | 30500594 |
| In Use Cover Guardian 10x10 | 30500595 |
| In Use Cover Guardian Round | 30500596 |
| Vessel Clamp | 30500597 |
| Clamp, Specialty, Nester, CLS-NESTXS | 30392318 |
| Clamp, Specialty, Column, CLS-COLMNSL | 30392316 |
| Clamp, Specialty, Column, CLS-COLMNSM | 30392315 |
| Clamp, Specialty, Column, CLS-COLMNSS | 30392314 |
| Clamp, Specialty, Column, CLS-COLMNSX | 30392317 |
| Ultra Flex Support Kit | 30400145 |
| Support Rod And Clamp Kit | 30400146 |
| Spinbar 2.5 cm PTFE | 30400147 |
| Spinbar 3.8 cm PTFE | 30400148 |
| Spinbar 7 cm PTFE | 30400149 |
| Spinbar 10 cm with Pivot Ring PTFE | 30400150 |

Mini Hotplates & Stirrers

Compact, Reliable, Easy-to-Use Hotplates and Stirrers for Basic Heating and Stirring

- Select the function you need for your everyday heating and stirring. Five models to choose from - Hotplate, Fixed Temperature Hotplate, Stirrer, Auto Stirrer and combination Hotplate-Stirrer.
- Our mini hotplate stirrer is easy to clean up. All models feature a smooth, chemical-resistant ceramic top plate. This brilliant white reflective surface is optimal for viewing your samples.
- Designed for safety - unique housing material is heat-resistant making it not only cool to the touch, but also chemical-resistant. Spill resistant design ensures long-term reliable use.



| | |
|---------------------|--|
| Application | Boiling Water, Dissolving Buffers and Reagents, Preparing Media, Concentrating Samples |
| Operation | Detachable 3-wire cord and plug (included) |
| Construction | Valox housing, basic control knobs, 3,8 cm stir bar (included with Stirring models), On/Off toggle switch (Fixed Temperature models) |

Basic Mini Hotplates

| Model | Description | Item N° |
|-------------------------------------|---------------------------------------|----------|
| HSMNHP4CAL | Basic Mini Hotplate | 30392012 |
| HSMNHP4CFT | Basic Mini Fixed Temperature Hotplate | 30392033 |
| Specifications | | |
| Temperature Range | to 500°C* | |
| Speed Range | - | |
| Maximum Capacity (H ₂ O) | 1 L | |
| Top Plate Dimensions | 10,2 × 10,2 cm | |
| Overall Dimensions (L × W × H) | 20,1 × 15,2 × 12,7 cm | |
| Ship Weight | 1,8 kg | |

Basic Mini Stirrers

| Model | Description | Item N° |
|-------------------------------------|-------------------------|----------|
| HSMNST4CAL | Basic Mini Stirrer | 30392019 |
| HSMNAS4CAL | Basic Mini Auto-Stirrer | 30392040 |
| Specifications | | |
| Temperature Range | - | |
| Speed Range | 100 to 1200 rpm | |
| Maximum Capacity (H ₂ O) | 1 L | |
| Top Plate Dimensions | 10,2 × 10,2 cm | |
| Overall Dimensions (L × W × H) | 20,1 × 15,2 × 12,7 cm | |
| Ship Weight | 1,8 kg | |

Basic Mini Hotplate-Stirrers

| Model | Description | Item N° |
|-------------------------------------|-----------------------------|----------|
| HSMNHS4CAL | Basic Mini Hotplate-Stirrer | 30392026 |
| Specifications | | |
| Temperature Range | to 500°C | |
| Speed Range | 100 to 1200 rpm | |
| Maximum Capacity (H ₂ O) | 1 L | |
| Top Plate Dimensions | 10,2 × 10,2 cm | |
| Overall Dimensions (L × W × H) | 20,1 × 15,2 × 12,7 cm | |
| Ship Weight | 1,8 kg | |

Accessories

| Description | HSMNHP4CAL | HSMNHP4CFT | HSMNST4CAL | HSMNAS4CAL | HSMNHS4CAL | Item N° |
|------------------------------------|------------|------------|------------|------------|------------|----------|
| Ultra Flex Support Kit | X | X | X | X | X | 30400145 |
| Support Rod And Clamp Kit | X | X | X | X | X | 30400146 |
| Spinbar 2,5 cm PTFE | | | X | X | X | 30400147 |
| Spinbar 3,8 cm PTFE | | | X | X | X | 30400148 |
| Spinbar 7 cm PTFE | | | X | X | X | 30400149 |
| Spinbar 10 cm with Pivot Ring PTFE | | | X | X | X | 30400150 |

Stirrers and Hotplate-Stirrers are supplied with a 3,8 cm PTFE coated stir bar.
* Fixed Temperature Hotplate has a fixed temperature of 500°C.

Bead Mill Homogenizers



Bead Mill Homogenizers

Bead Mill Homogenizers

Bead Mill Homogenizers

Provides Simple and Powerful Solutions for Rapid High Throughput Grinding

- For high performance grinding, the HT Lysing Homogenizer is one of the most flexible models on the market. The built-in adjustable holder allows for easy processing of samples – no accessories needed.
- This versatile Homogenizer allows high throughput grinding, and is ideal for processing multiple tubes, microplates, deep-well plates, or any sample container that fits in the 10,2x12,7x6,4 cm holder.
- Take the guesswork out of sample preparation. Five preset programs optimized for speed and time to process the most common samples, including bacteria, fungi, plant, and animal tissue easily.



| | |
|------------------------|---|
| Application | DNA, RNA and Protein Analysis (from mammalian tissue, plant, soil, seed, fungi, bacteria, virus and other cells), Cell Lysing, PCR, Gene Expression |
| Display | Easy-to-read LED display allows the operator to view speed and time settings |
| Operation | Five pre-set program buttons and touchpad controls for speed and time |
| Construction | Polyurethane Elastomer top housing, Cycloy bottom housing, and Lexan lid |
| Design Features | Microprocessor-controlled unit includes sample clamp and hex key |

| Model | Type | Speed Range | Motion | Timer | Maximim Capacity | Dimensions (L x W x H) | Item No. |
|--------|-----------------------------|------------------------------------|-----------------------------|--|------------------|------------------------|----------|
| HOHTDG | HT (High Throughput) Lysing | 300 to 1600 rpm (1 rpm increments) | Reciprocal, vertical, 31 mm | 1 second to 10 minutes (1 second increments) | 300 g | 44,6 x 28,6 x 51,8 cm | 30391396 |

Accessories

| Material description | Item No. |
|---|----------|
| Lysing skirted tube for bacteria, 2ml, white cap, DNase/RNase free, 100 µm Zirconium Beads, 100/box | 30391402 |
| Lysing skirted tube for yeast, 2ml, yellow cap, DNase/RNase free, 400 µm Zirconium Beads, 100/box | 30391404 |
| Lysing skirted tube for fungi, 2ml, blue cap, DNase/RNase free, 800 µm Zirconium Beads, 100/box | 30391405 |
| Lysing skirted tube for soft sample, 2ml, orange cap, DNase/RNase free, 1,4 mm Zirconium Beads, 100/box | 30391406 |
| Lysing skirted tube for plant, 2ml, green cap, DNase/RNase free, 3 mm Zirconium Beads, 100/box | 30391408 |
| Lysing skirted tube for animal tissue, 2ml, red cap, DNase/RNase free, 3 mm Stainless Steel Grinding Balls, 100/box | 30391409 |
| Lysing skirted tube for environmental sample, 2ml, brown cap, DNase/RNase free, 100 µm/800 µm/3 mm Zirconium Beads, 100/box | 30391410 |
| Tube Rack, 25 x 2 ml Tubes, 2 per pack | 30391431 |
| Sample Tube Kit, 14 Tubes; 2 each of White, Yellow, Blue, Orange, Green, Red, and Brown | 30391433 |

Centrifuges



Centrifuges

Abbreviations List:

- ID – auto rotor identification
- Hi – version with higher speed
- Vac – Vacutainer
- FA – Conical bottom/Falcon
- FB – Flat bottom
- RB – Round bottom
- Rim – Skirted conical bottom
- Sar – Sarstedt

Frontier 5000 Series Multi Pro

Powerful and Versatile Universal Centrifuges for Virtually Every Lab Application

- Our multi-purpose centrifuges offer a high-speed centrifugation platform which can be customized to fit workflow needs using a wide variety of rotors and accessories.
- The intuitive design of the centrifuges & accessories enable easy access to parameter settings, and quick rotation between applications.
- The performance of these centrifuges is propelled by German engineering, and high-quality components for reliable use.



| | |
|------------------------|---|
| Application | Centrifugal Separation, General Sample Preparation, Cell Pelleting, Protein Separation, Nucleic Acid Separation, Cell Concentrating, Chemical Separation, Diagnostics, Environmental Sample Preparation, Blood Sample Processing |
| Display | Backlit Liquid Crystal Display (LCD) |
| Operation | Designed to be used with a variety of rotors and accessories |
| Construction | Corrosion-resistant stainless steel chamber with Polycarbonate/ABS plastic lid |
| Design Features | Ten acceleration & deceleration rates, selection of running time from 10s to 99h 59min or continuous, quick spin, CFC-free refrigeration system, sample temp. indication (refrigerated models), lid-locking system, over-speed protection, dual imbalance sensing |

| Model | Material Description | Item No. |
|---------|--|----------|
| FC5816 | Multi Pro Centrifuge FC5816, max RPM 15000, max RCF 21379 x g | 30314816 |
| FC5816R | Multi Pro Centrifuge FC5816R, max RPM 16000, max RCF 24325 x g, refrigerated | 30314818 |
| FC5718 | Multi Pro Centrifuge FC5718, max RPM 18000, max RCF 23542 x g | 30314812 |
| FC5718R | Multi Pro Centrifuge FC5718R, max RPM 18000, max RCF 23542 x g, refrigerated | 30314814 |
| FC5714 | Multi Pro Centrifuge FC5714, max RPM 14000, max RCF 18624 x g | 30314810 |

Accessories

| Material description | Item No. |
|---|-----------------|
| Rotor, Swing out, 4x250ml, ID (FC5816 and FC5816R only) | 30314820 |
| Rack, 8x4-10ml D16mm Vac, 2/pk | 30304367 |
| Adapter, 9x1,5/2,0ml D11mm, 2/pk | 30304368 |
| Screw Cap, Rack of 250ml Rotor, 2/pk | 30314901 |
| O-ring, Rack of 250ml Rotor, 10/pk | 30314902 |
| Rack, 1x250ml D62mm FB, 2/pk | 30314903 |
| Rack, 1x100ml D41mm RB, 2/pk | 30314904 |
| Rack, 3x50ml D29mm RB, 2/pk | 30314905 |
| Rack, 3x50ml D29mm FA, 2/pk | 30314906 |
| Rack, 1x50ml D34mm RB, 2/pk, v3 | 30314907 |
| Rack, 2x50ml D29mm Rim, 2/pk | 30314908 |
| Rack, 1x50ml D29mm Rim, 2/pk, v3 | 30314909 |
| Rack, 5x25ml D24,5mm RB, 2/pk | 30314910 |
| Rack, 3x25ml D24,5mm Rim, 2/pk | 30314911 |
| Rack, 9x15ml D17mm RB, 2/pk | 30314912 |
| Rack, 7x15ml D17mm FA, 2/pk | 30314913 |
| Rack, 7x15ml D17mm Rim, 2/pk | 30314914 |
| Rack, 8x10ml D16mm RB, 2/pk | 30314915 |
| Rack, 14x5-7ml D13mm RB, 2/pk | 30314916 |
| Rack, 10x1,6-7ml D13mm Vac, 2/pk | 30314917 |
| Rotor, Swing out, 16x50ml, ID (FC5816 and FC5816R only) | 30314828 |
| Rack, 4x50ml D29mm FA, 2/pk | 30304375 |
| Rack, 10x15ml D17mm FA, 2/pk | 30314583 |
| Rack, 14x5-7ml D13mm Vac/Sar, 2/pk | 30314584 |
| Rack, 12x4-10ml D16mm Vac/Sar, 2/pk | 30314585 |
| Rotor, Swing out, 4x100ml, ID (FC5714, FC5718, and FC5718R only) | 30314822 |
| Rack, 1x100ml D46mm RB, 2/pk | 30314842 |
| Rack, 1x85ml D38mm RB, 2/pk | 30314843 |
| Rack, 1x50ml D34mm RB, 2/pk | 30314844 |
| Rack, 1x50ml D29mm RB, 2/pk | 30314845 |

| Material description | Item No. |
|--|-----------------|
| Rack, 1x50ml D29mm FA, 2/pk | 30314846 |
| Rack, 1x50ml D29mm Rim, 2/pk | 30314847 |
| Rack, 1x30ml D25mm Rim, 2/pk | 30314848 |
| Rack, 1x25ml D25mm RB, 2/pk | 30314849 |
| Rack, 2x15ml D17mm FA, 2/pk | 30314850 |
| Rack, 1x15ml D17mm Rim, 2/pk | 30314851 |
| Rack, 7x15ml D17mm RB, 2/pk | 30314852 |
| Rack, 9x5-7ml D13mm RB, 2/pk | 30314853 |
| Rack, 10x1,5ml D11mm, 2/pk | 30314854 |
| Rack, 9x4,5ml D12mm FB, 2/pk | 30314855 |
| Rack, 7x5-7ml D13mm RB, 2/pk | 30314856 |
| Rack, 7x5-7ml D13mm Vac, 2/pk | 30314857 |
| Rack, 5x4-10ml D16mm Sar, 2/pk | 30314858 |
| Rotor, Swing out, 4x100ml, ID, Sealable (FC5714, FC5718, and FC5718R only) | 30314823 |
| Bucket, 100ml w/o Cap, 2/pk | 30314860 |
| Bucket, 100ml w/ Cap, Sealable, 2/pk | 30314861 |
| Screw Cap, 100ml Bucket, Sealable, 2/pk | 30314862 |
| O-ring, 100ml Bucket, Sealable, 10/pk | 30314863 |
| Rack, 1x100ml D40mm RB, 2/pk | 30314864 |
| Rack, 1x85ml D38mm RB, 2/pk, v2 | 30314865 |
| Rack, 1x50ml D34mm RB, 2/pk, v2 | 30314866 |
| Rack, 1x50ml D29mm RB, 2/pk, v2 | 30314867 |
| Rack, 1x50ml D29mm FA, 2/pk, v | 30314868 |
| Rack, 1x50ml D29mm Rim, 2/pk, v2 | 30314869 |
| Rack, 1x30ml D25mm Rim, 2/pk, v2 | 30314870 |
| Rack, 1x25ml D25mm RB, 2/pk, v2 | 30314871 |
| Rack, 1x15ml D17mm FA, 2/pk | 30314872 |
| Rack, 2x15ml D17mm FA, 2/pk, v2 | 30314873 |
| Rack, 2x15ml D17mm Rim, 2/pk | 30314874 |
| Rack, 4x15ml D17mm RB, 2/pk | 30314875 |
| Rack, 7x5-7ml D13mm RB, 2/pk, v2 | 30314876 |
| Rack, 5x1,5ml D11mm, 2/pk | 30314877 |
| Rack, 3x10ml D17mm Sar, 2/pk | 30314878 |
| Rack, 4x5-7ml D13mm RB, 2/pk | 30314879 |
| Rack, 4x10ml D17mm Vac, 2/pk | 30314880 |
| Bucket, 2x50ml D29mm FA, w/ Rack, 2/pk | 30314881 |
| Bucket, 3x15ml D17mm FA, w/ Rack, 2/pk | 30314882 |
| Rotor, Swing out, 2x3MTP, w/ bucket, ID | 30314824 |
| Bucket, 3xMTP, 2/pk | 30314890 |
| Adapter, 48x1,5/2,0ml D11mm, 2/pk | 30314891 |
| Rotor, Angle, 6x250ml FB, ID (FC5816 and FC5816R only) | 30314821 |
| Adapter, 8x1,5ml D11mm, 2/pk | 30304369 |
| Adapter, 5x10ml D16mm RB, 2/pk | 30304370 |
| Adapter, 4x15ml D17mm FA, 2/pk | 30304371 |
| Adapter, 2x30ml D26mm RB, 2/pk | 30304372 |
| Adapter, 1x50ml D29mm RB, 2/pk | 30304373 |
| Adapter, 1x50ml D30mm FA, 2/pk | 30304374 |
| Rotor, Angle, 6x85ml RB, ID (FC5718, FC5718R, FC5816, and FC5816R only) | 30314826 |
| Adapter, 1x15ml D17mm RB, 2/pk | 30314893 |
| Adapter, 1x30ml D25mm RB, 2/pk | 30314894 |
| Adapter, 1x50ml D29mm RB, 2/pk, v2 | 30314895 |
| Adapter, 1x50ml D29mm FA, 2/pk | 30314896 |
| Adapter, 1x15ml D17mm FA, 2/pk | 30314897 |
| Adapter, 2x15ml D17mm RB, 2/pk | 30314898 |
| Adapter, 1x16ml D18mm RB, 2/pk | 30314899 |
| Rotor, Angle, 10x50ml FA, ID (FC5718, FC5718R, FC5816, and FC5816R only) | 30314829 |
| Adapter, 1x1,5/2,0ml D11mm, 6/pk | 30130886 |
| Adapter, 1x7ml D13,5mm RB, 2/pk | 30130889 |
| Adapter, 1x5ml D13,5mm, 2/pk | 30130890 |
| Adapter, 1x15ml D17mm RB, 2/pk, v2 | 30472300 |
| Adapter, 1x15ml D17mm FA, 2/pk, v2 | 30472307 |
| Rotor, Angle, 4x85ml RB, ID, Hi (FC5718, FC5718R, FC5816, and FC5816R only) | 30314827 |
| Adapter, 1x15ml D17mm RB, 2/pk | 30314893 |
| Adapter, 1x30ml D25mm RB, 2/pk | 30314894 |
| Adapter, 1x50ml D29mm RB, 2/pk, v2 | 30314895 |
| Adapter, 1x50ml D29mm FA, 2/pk | 30314896 |

| Material description | Item No. |
|---|-----------------|
| Adapter, 1x15ml D17mm FA, 2/pk | 30314897 |
| Adapter, 2x15ml D17mm RB, 2/pk | 30314898 |
| Adapter, 1x16ml D18mm RB, 2/pk | 30314899 |
| Rotor, Angle, 6x50ml RB, ID, Hi (FC5718, FC5718R, FC5816, and FC5816R only) | 30314831 |
| Adapter, 1x30ml D26mm, 2/pk | 30130891 |
| Adapter, 1x16ml D18mm, 2/pk | 30130892 |
| Adapter, 1x15ml D17mm, 2/pk | 30130893 |
| Adapter, 1x15ml D17,5mm FA, 2/pk | 30314892 |
| Rotor, Angle, 20x10ml RB, ID, Hi (FC5718, FC5718R, FC5816, and FC5816R only) | 30314833 |
| Rotor, Angle, 44x1,5/2,0ml, ID (FC5718, FC5718R, FC5816, and FC5816R only) | 30314835 |
| Adapter, 1x0,2/0,4ml D6mm, 6/pk | 30130884 |
| Adapter, 1x0,5ml D8mm, 6/pk | 30130885 |
| Rotor, Angle, 30x1,5/2,0ml, ID, Sealable (FC5714, FC5718, and FC5718R only) | 30314836 |
| Adapter, 1x0,2/0,4ml D6mm, 6/pk | 30130884 |
| Adapter, 1x0,5ml D8mm, 6/pk | 30130885 |
| Rotor, Angle, 30x15ml RB/FA, ID | 30314832 |
| Adapter, 1x1,5/2,0ml D11mm, 6/pk | 30130886 |
| Adapter, 1x7ml D13,5mm RB, 2/pk | 30130889 |
| Adapter, 1x5ml D13,5mm, 2/pk | 30130890 |
| Rotor, Angle, 24x1,5/2,0ml, ID, Sealable | 30304361 |
| Adapter, 1x0,2/0,4ml D6mm, 6/pk | 30130884 |
| Adapter, 1x0,5ml D8mm, 6/pk | 30130885 |
| Rotor, Angle, 24x1,5/2,0ml, ID | 30314838 |
| Adapter, 1x0,2/0,4ml D6mm, 6/pk | 30130884 |
| Adapter, 1x0,5ml D8mm, 6/pk | 30130885 |
| Rotor, Angle, 6x85ml RB, ID, Hi (FC5718 and FC5718R only) | 30314825 |
| Adapter, 1x15ml D17mm RB, 2/pk | 30314893 |
| Adapter, 1x30ml D25mm RB, 2/pk | 30314894 |
| Adapter, 1x50ml D29mm RB, 2/pk, v2 | 30314895 |
| Adapter, 1x50ml D29mm FA, 2/pk | 30314896 |
| Adapter, 1x15ml D17mm FA, 2/pk | 30314897 |
| Adapter, 2x15ml D17mm RB, 2/pk | 30314898 |
| Adapter, 1x16ml D18mm RB, 2/pk | 30314899 |
| Rotor, Angle, 6x50ml RB/FA, ID (FC5714, FC5718, and FC5718R only) | 30314830 |
| Adapter, 1x1,5/2,0ml D11mm, 6/pk | 30130886 |
| Adapter, 1x7ml D13,5mm RB, 2/pk | 30130889 |
| Adapter, 1x5ml D13,5mm, 2/pk | 30130890 |
| Adapter, 1x30ml D26mm, 2/pk | 30130891 |
| Adapter, 1x16ml D18mm, 2/pk | 30130892 |
| Adapter, 1x15ml D17mm, 2/pk | 30130893 |
| Adapter, 1x15ml D17mm RB/FA, 2/pk, v2 | 30130894 |
| Rotor, Angle, 12x15ml RB/FA, ID (FC5714, FC5718, and FC5718R only) | 30314834 |
| Adapter, 1x1,5/2,0ml D11mm, 6/pk | 30130886 |
| Adapter, 1x7ml D13,5mm RB, 2/pk | 30130889 |
| Adapter, 1x5ml D13,5mm, 2/pk | 30130890 |
| Rotor, Angle, 12x1,5/2,0ml, ID (FC5718 and FC5718R only) | 30314839 |
| Adapter, 1x0,2/0,4ml D6mm, 6/pk | 30130884 |
| Adapter, 1x0,5ml D8mm, 6/pk | 30130885 |
| Adapter, 1x1,5ml for over16000xg, 6/pk | 30314900 |
| Rotor, Angle, 64x0,5ml, ID (FC5718 and FC5718R only) | 30314840 |
| Rotor, Angle, 4x8-w PCR Strip, ID (FC5718 and FC5718R only) | 30314841 |

Frontier 5000 Series Micro

Dependable Benchtop Micro Centrifuges Ideal for High-Speed Lab Applications

- Frontier Micro centrifuges offer a 1,5/2ml microtube rotor with a biocontainment option. Additional rotor options support 5ml microtubes, spin columns, PCR stripes, and hematocrit capillary tubes.
- Designed for ease of operation, Frontier Micro centrifuges feature convenient control on an intuitive interface, which allows for responsive operation – even when wearing gloves.
- Enclosing all their functionalities within a small footprint, Frontier Micro centrifuges save valuable space on the lab bench.



FC5513



FC5515

| | |
|------------------------|---|
| Application | Centrifugation |
| Display | LCD backlight, two lines |
| Operation | AC Power (included) |
| Construction | Brushless quiet motor, small footprint |
| Design Features | High sample throughput, multi-safety control, personal program function |

| Model | Material Description | Item No. |
|----------|---|----------|
| FC5515 | Micro Centrifuge FC5515, max RPM 15200, max RCF 21953 x g | 30130866 |
| FC5515R | Micro Centrifuge FC5515R, max RPM 15200, max RCF 21953 x g, refrigerated | 30130868 |
| FC5513 | Micro Centrifuge FC5513, max RPM 13500, max RCF 17317 x g | 30393187 |
| FC5513-K | Kit Micro Centrifuge FC5513, max RPM 13500, max RCF 17317 x g, w/angle rotor 24x1,5/2,0ml | 30370691 |

Accessories

| Material description | Item No. |
|---|-----------------|
| Rotor, Angle, 24x1,5/2,0ml (only FC5515 and FC5515R) | 30130870 |
| Adapter, D6mm, 0,2/0,4ml Tubes x6 | 30130884 |
| Adapter, D8mm, 0,5ml Tubes x6 | 30130885 |
| Rotor, Angle, 24x1,5/2,0ml, Sealable (only FC5515 and FC5515R) | 30130871 |
| Adapter, D6mm, 0,2/0,4ml Tubes x6 | 30130884 |
| Adapter, D8mm, 0,5ml Tubes x6 | 30130885 |
| Rotor, Angle, 30x1,5/2,0ml, Sealable (only FC5515 and FC5515R) | 30130872 |
| Adapter, D6mm, 0,2/0,4ml Tubes x6 | 30130884 |
| Adapter, D8mm, 0,5ml Tubes x6 | 30130885 |
| Rotor, Angle, 44x1,5/2,0ml (only FC5515 and FC5515R) | 30130879 |
| Adapter, D6mm, 0,2/0,4ml Tubes x6 | 30130884 |
| Adapter, D8mm, 0,5ml Tubes x6 | 30130885 |
| Rotor, Angle, 12x5ml, Sealable (only FC5515 and FC5515R) | 30130873 |
| Adapter, D11mm, 1,5/2,0ml Tubes x6 | 30130886 |
| Adapter, D12,6mm, 1,0ml Cryo x6 | 30130887 |
| Adapter, D12,6mm, 1,8ml Cryo x6 | 30130888 |
| Rotor, Angle, 4x8-Place PCR Stripes (only FC5515 and FC5515R) | 30130874 |
| Rotor, Hematocrit, 24xCapillaries (only FC5515) | 30130881 |
| Rotor, Angle, 24x1,5/2,0 ml (only FC5513 and FC5513-K) | 30472301 |
| Adapter, D8mm, 0,5ml, 6/pk | 30130885 |
| Adapter, D6mm, 0,2/0,4ml, 6/pk | 30130884 |
| Rotor, Angle, 24x1,5/2,0 ml, Sealable, V2 (only FC5513 and FC5513-K) | 30472302 |
| Adapter, D8mm, 0,5ml, 6/pk | 30130885 |
| Adapter, D6mm, 0,2/0,4ml, 6/pk | 30130884 |
| Rotor, Angle, 18x2 ml SC (only FC5513 and FC5513-K) | 30472303 |
| Rotor, Hematocrit, 24xCapillaries, V2 (only FC5513 and FC5513-K) | 30472304 |

Frontier 5000 Series Multi

Reliable and Compact Multi-Function Centrifuge For Standard Life Science Separation Applications

- Designed for ease of operation, Frontier™ Multi Centrifuges feature convenient control on an intuitive interface, which allows for responsive operation – even when wearing gloves.
- Frontier™ Multi Centrifuges can accommodate standard 50ml and 15ml tubes, including common blood tubes. When used with accessories, rotors can be adapted for sizes as small as 1,5ml.
- Enclosing all its functionalities within a small footprint, Frontier™ Multi Centrifuges save valuable space on the lab bench.

| | |
|------------------------|--|
| Application | Centrifugation |
| Display | LCD backlight, two lines |
| Operation | AC Power (included) |
| Construction | Brushless quiet motor, small footprint |
| Design Features | Easy installation design |



FC5707



FC5706

| Model | Material Description | Item No. |
|----------|--|----------|
| FC5706 | Multi Centrifuge FC5706, max RPM 6000, max RCF 4427 x g | 30130875 |
| FC5706-K | Kit Multi Centrifuge FC5706, max RPM 6000, max RCF 4427 x g w/ angle rotor 12x15ml | 30332131 |
| FC5707-K | Kit Multi Centrifuge FC5707, max RPM 6800, max RCF 4445 x g, w/angle rotor 8x15ml | 30393189 |

Accessories

| Material Description | Item No. |
|--|-----------------|
| Rotor, Swing Out, 6x5ml RB (only FC5706 and FC5706-K) | 30130880 |
| Buckets for swing out rotor (2 pcs.) | 30130895 |
| Rotor, Angle, 12x15ml RB (only FC5706 and FC5706-K) | 30130877 |
| Adapter, D11mm, 1,5/2,0ml Tubes x6 | 30130886 |
| Adapter, D13,5mm, 7ml Tubes x2 | 30130889 |
| Adapter, D13,5mm, 5ml Tubes x2 | 30130890 |
| Rotor, Angle, 6x50ml RB/FA (only FC5706 and FC5706-K) | 30130878 |
| Adapter, D26mm, 30ml Tubes x2 | 30130891 |
| Adapter, D18mm, 16ml Tubes x2 | 30130892 |
| Adapter, D17mm, 15ml RB/FA Tubes x2 | 30130894 |
| Adapter, D17mm, 15ml RB Tubes x2 | 30130893 |
| Rotor, Angle, 8x15ml (only FC5707-K) | 30472305 |
| Adapter, D13,5 mm, 7ml RB, 2/pk | 30130889 |
| Adapter, D13,5mm, 5ml RB, 2/pk | 30130890 |
| Adapter, D11mm, 1,5/2,0ml, 6/pk | 30130886 |

Frontier 5000 Series Mini

Powerful and Convenient Mini Centrifuge for Simple and Quick Life Science Separation Applications!

- With a low voltage power input, quiet brushless motor and a rubber base that absorbs vibrations, Frontier 5306 minimizes operational noise and reduces disruptions in the laboratory.
- Frontier 5306 is designed with operator safety in mind, and includes a rotor imbalance sensor and two safety switches which immediately stop the rotors should the lid open during use.
- Frontier 5306 takes simple one-step operation to a new level. Simply place your sample in the centrifuge, close the lid, and it will begin to rotate without the press of a button.



| | |
|------------------------|--|
| Application | Centrifugation |
| Operation | AC adapter (included) |
| Construction | Brushless quiet motor, auto shut-off safety switches |
| Design Features | One-touch operation |

| Model | Material Description | Item No. |
|--------|---|----------|
| FC5306 | Mini Centrifuge FC5306 with two rotors included, max RPM 6000, max RCF 2000 x g | 30134156 |

Accessories

| Material Description | Item No. |
|-----------------------------|----------|
| Rotor, Angle, 0,2ml PCR8 x4 | 30129560 |
| Rotor, Angle, 1,5/2ml x8 | 30129559 |
| Adapter, 0,2ml Tube x8 | 30129561 |
| Adapter, 0,5ml Tube x8 | 30129562 |

pH Meters, Electrodes & Solutions



*Bench Meters
Portable Meters
Pen Meters
Electrodes and Solutions*

Starter 5000 pH Bench

High Performance Bench Meter for Universal pH Applications

- Starter 5000's performance is propelled by a 1000 item library, 10 sensors for calibration storage, 8 predefined and 1 self-defined buffer groups, 3 endpoint modes and GLP mode.
- The colour touchscreen operates similar to smartphones and tablet computers and provides simple operation of the advanced features, such as one-touch toggling of measurement modes.
- With a standalone electrode holder, USB port, IP54 housing and in-use-cover, Starter 5000 provides the flexibility and protection that ensures smooth and enduring operation.



| | |
|------------------------|--|
| Application | pH, oxidation-reduction potential (ORP) measurement |
| Display | Backlit liquid crystal display (LCD), touchscreen |
| Operation | AC adapter (included) |
| Construction | ABS housing, standalone electrode holder, replaceable in-use cover |
| Communication | RS232 and USB (included). GLP/GMP data output with real-time clock |
| Design Features | 3 endpoint modes, continuous measurement mode, up to 9 point calibration, 1,000 measurement memory |

| Model | Material description | Item No. |
|----------|---|----------|
| ST5000-B | Starter 5000 meter, stand-alone electrode holder, in-use cover, 4GB USB-stick | 30129895 |
| ST5000-F | Starter 5000-B, ST350 electrode, pH buffer powder set (4,01, 7,00, 10,01) | 30129896 |

Electrodes and Sensors

| Model | Material description | Item No. |
|----------|---|----------|
| ST350 | 3 in 1 refillable pH electrode, integrated temperature probe, glass shaft | 30129354 |
| ST320 | 3 in 1 non-refillable pH electrode, gel electrolyte, integrated temperature probe, plastic shaft | 83033967 |
| ST310 | 3 in 1 refillable pH electrode, integrated temperature probe, plastic shaft | 83033965 |
| ST272 | 2-in-1 non-refillable puncture pH electrode, plastic shaft with steel head | 30393265 |
| ST270 | 2 in 1 non-refillable puncture pH electrode, glass shaft, suitable for samples such as meat, fruit etc. | 30240974 |
| ST260 | 2 in 1 pH electrode, glass shaft, double salt-bridge, suitable for Tris-buffer pH measurements | 30129357 |
| ST230 | 2 in 1 refillable pH electrode, glass shaft, suitable for muddy samples (such as milk, juice etc.) | 83033968 |
| ST210 | 2 in 1 refillable pH electrode, plastic shaft | 83033966 |
| STMICRO5 | 2 in 1 refillable pH electrode, glass shaft, 80mm length and 5mm diameter, suitable for tubes and narrow containers | 30087566 |
| STMICRO8 | 2 in 1 refillable pH electrode, glass shaft, 150mm length and 8mm diameter, suitable for tubes and narrow containers | 30087569 |
| STSURF | 2 in 1 refillable pH electrode, suitable for flat surface applications, plastic shaft | 30129470 |
| STPURE | 2 in 1 refillable pH electrode, glass shaft, suitable for water samples such as distilled water, rain water, tap water etc. | 83033969 |
| STORP1 | Non-refillable ORP electrode, gel electrolyte, plastic shaft | 30038555 |
| STORP2 | Refillable ORP electrode, glass shaft | 30038553 |
| STTEMP30 | Temperature probe 30kΩ, stainless steel shaft, temperature range 0 – 100°C | 83033970 |

| Accessories | Item No. |
|--|----------|
| Buffer solution pH 1,68, 250ml | 30100424 |
| Buffer solution pH 4,01, 250ml | 30100425 |
| Buffer solution pH 6,86, 250ml | 30100426 |
| Buffer solution pH 7,00, 250ml | 30100427 |
| Buffer solution pH 9,18, 250ml | 30100428 |
| Buffer solution pH 10,01, 250ml | 30100429 |
| Buffer solution pH 12,45, 250ml | 30100440 |
| pH buffer powder set (4,01, 7,00, 10,01) | 83033971 |
| Reference electrolyte for pH electrodes (3M KCl solution saturated AgCl, 30ml) | 30059255 |
| pH electrode protection solution (3M KCl, 125ml) | 30059256 |
| ST3100/3100C and ST5000 stand-alone electrode holder | 30058733 |
| pH sensor protection bottles (package of 10) | 30064800 |
| ST5000 in-use cover | 30129897 |
| Ink Ribbon, SF40A SF42A | 12120798 |
| Paper Roll, 57,5mm, SF40A | 12120799 |
| SF40A printer | 30064202 |

Starter 3100 pH Bench

Smart pH Bench Meter for Standard Laboratory Applications

- Starter 3100's intuitive software includes three point calibration, three buffer groups, automatic and manual endpoint functions, as well as a 99 item library.
- Among Starter 3100's user-friendly features that support ease-of-use are an adjustable standalone electrode holder and large backlit LCD display.
- Documenting measurement data is made simple through the RS232 which can be used to connect peripheral devices such as printers or computers to the meter.



| | |
|------------------------|--|
| Application | mV -1999~+1999 mV, pH -2,00 -16,00, -5~110°C |
| Display | Backlit liquid crystal display (LCD) |
| Operation | AC adapter (included) |
| Construction | ABS housing, standalone electrode holder, replaceable in-use cover |
| Communication | RS232 (included) |
| Design Features | 99 measurement memory, automatic and manual endpoint functions, automatic and manual temperature compensation, quick reference guide |

| Model | Material description | Item No. |
|----------|---|----------|
| ST3100-B | Starter 3100 meter, stand-alone electrode holder | 30057497 |
| ST3100-F | Starter 3100-B, ST310 electrode, pH buffer powder set (4,01, 7,00, 10,01), in-use cover | 30058489 |

Electrodes and Sensors

| Model | Material description | Item No. |
|----------|---|----------|
| ST350 | 3 in 1 refillable pH electrode, integrated temperature probe, glass shaft | 30129354 |
| ST320 | 3 in 1 non-refillable pH electrode, gel electrolyte, integrated temperature probe, plastic shaft | 83033967 |
| ST310 | 3 in 1 refillable pH electrode, integrated temperature probe, plastic shaft | 83033965 |
| ST272 | 2-in-1 non-refillable puncture pH electrode, plastic shaft with steel head | 30393265 |
| ST270 | 2 in 1 non-refillable puncture pH electrode, glass shaft, suitable for samples such as meat, fruit etc. | 30240974 |
| ST260 | 2 in 1 pH electrode, glass shaft, double salt-bridge, suitable for Tris-buffer pH measurements | 30129357 |
| ST230 | 2 in 1 refillable pH electrode, glass shaft, suitable for muddy samples (such as milk, juice etc.) | 83033968 |
| ST210 | 2 in 1 refillable pH electrode, plastic shaft | 83033966 |
| STMICRO5 | 2 in 1 refillable pH electrode, glass shaft, 80mm length and 5mm diameter, suitable for tubes and narrow containers | 30087566 |
| STMICRO8 | 2 in 1 refillable pH electrode, glass shaft, 150mm length and 8mm diameter, suitable for tubes and narrow containers | 30087569 |
| STSURF | 2 in 1 refillable pH electrode, suitable for flat surface applications, plastic shaft | 30129470 |
| STPURE | 2 in 1 refillable pH electrode, glass shaft, suitable for water samples such as distilled water, rain water, tap water etc. | 83033969 |
| STORP1 | Non-refillable ORP electrode, gel electrolyte, plastic shaft | 30038555 |
| STORP2 | Refillable ORP electrode, glass shaft | 30038553 |
| STREF1 | Silver/silver chloride reference electrode | 30059253 |
| STTEMP30 | Temperature probe 30kΩ, stainless steel shaft, temperature range 0 – 100°C | 83033970 |

| Accessories | Item No. |
|--|----------|
| Buffer solution pH 1,68, 250ml | 30100424 |
| Buffer solution pH 4,01, 250ml | 30100425 |
| Buffer solution pH 6,86, 250ml | 30100426 |
| Buffer solution pH 7,00, 250ml | 30100427 |
| Buffer solution pH 9,18, 250ml | 30100428 |
| Buffer solution pH 10,01, 250ml | 30100429 |
| Buffer solution pH 12,45, 250ml | 30100440 |
| pH buffer powder set (4,01, 7,00, 10,01) | 83033971 |
| Reference electrolyte for pH electrodes (3M KCl solution saturated AgCl, 30ml) | 30059255 |
| pH electrode protection solution (3M KCl, 125ml) | 30059256 |
| Starter 3100/3100C and Starter 5000 stand-alone electrode holder | 30058733 |
| pH sensor protection bottles (package of 10) | 30064800 |
| ST3100/ST3100C in-use cover | 30058734 |
| Ink Ribbon, SF40A SF42A | 12120798 |
| Paper Roll, 57,5mm, SF40A | 12120799 |
| SF40A printer | 30064202 |

Starter 3100C Conductivity Bench

Smart Conductivity Bench Meter for Standard Laboratory Applications

- Starter 3100C's intuitive software includes four predefined calibration standards, automatic and manual endpoint functions, and one touch conversion between measurement modes.
- Among Starter 3100C's user-friendly features that support ease-of-use are an adjustable standalone electrode holder and large backlit LCD display.
- Documenting measurement data is made simple through the RS232 which can be used to connect peripheral devices such as printers or computers to the meter.



| | |
|------------------------|---|
| Application | Conductivity 0,0 $\mu\text{S}/\text{cm}$ ~199,9 mS/cm, TDS 0,1 mg/L~199,9 g/L, Salinity 0,00~19,99 psu, 0~100°C |
| Display | Backlit liquid crystal display (LCD) |
| Operation | AC adapter (included) |
| Communication | RS232 (included) |
| Construction | ABS housing, standalone electrode holder, replaceable in-use cover |
| Design Features | 99 measurements memory, automatic and manual endpoint functions, automatic and manual temperature compensation |

| Model | Material description | Item No. |
|-----------|--|----------|
| ST3100C-B | Starter 3100C meter, stand-alone electrode holder, conductivity standards 1413 $\mu\text{S}/\text{cm}$ and 12,88mS/cm (20ml bottles) | 30058730 |
| ST3100C-F | Starter 3100C-B, STCON3 conductivity probe (range 70 $\mu\text{S}/\text{cm}$ – 200mS/cm), in-use cover | 30058731 |

Electrodes and Sensors

| Model | Material description | Item No. |
|--------|---|----------|
| STCON7 | 2-pole conductivity probe, integrated temperature probe, measurement range 0,02 $\mu\text{S}/\text{cm}$ – 200 $\mu\text{S}/\text{cm}$ | 30080693 |
| STCON3 | 4-ring conductivity probe, integrated temperature probe, measurement range 70 $\mu\text{S}/\text{cm}$ – 200mS/cm | 83033972 |

| Accessories | Item No. |
|---|----------|
| Conductivity standard solution 10 $\mu\text{S}/\text{cm}$, 250ml | 30100441 |
| Conductivity standard solution 84 $\mu\text{S}/\text{cm}$, 250ml | 30100442 |
| Conductivity standard solution 1413 $\mu\text{S}/\text{cm}$, 250ml | 30100443 |
| Conductivity standard solution 12,88 mS/cm, 250ml | 30100444 |
| ST3100/3100C and ST5000 stand-alone electrode holder | 30058733 |
| ST3100/ST3100C in-use cover | 30058734 |
| SF40A printer | 30064202 |
| Ink Ribbon, SF40A SF42A | 12120798 |
| Paper Roll, 57,5mm, SF40A | 12120799 |

Starter 3100M pH and Conductivity Bench

The Versatile Multi-Parameter Bench Meter

- Auto temperature compensation, auto buffer recognition, six pH buffer groups, five conductivity standards and automatic/manual endpoints ensure accurate and stable measurement.
- An adjustable electrode holder, a large backlit LCD for optimal viewing of results, and a Quick Guide with setup and navigation info combine to make ST3100M a truly user-friendly experience.
- Documenting data is made efficient with a 99-item memory for pH and conductivity measurements. RS232 interface allows you to connect to an external device such as a printer to store or transfer data.



| | |
|------------------------|---|
| Application | pH, Oxidation-Reduction Potential (ORP), Conductivity, Total Dissolved Solids (TDS), Salinity, Resistivity and Temperature Measurements |
| Display | Backlit Liquid Crystal Display (LCD) |
| Operation | AC adapter (included) |
| Communication | RS232 (included) |
| Construction | ABS housing, in-use cover, mechanical keys |
| Design Features | Three point calibration (pH), electrode condition icon, parameter toggle button, compact design |

| Model | Material description | Item No. |
|-----------|---|----------|
| ST3100M-B | Starter 3100M meter, stand-alone electrode holder, in use cover, pH buffer powder set (4,01, 7,00, 10,01), 1413 $\mu\text{S}/\text{cm}$ | 30276082 |
| ST3100M-F | ST3100M-B, ST310 3-in-1 refillable pH electrode, STCON3 4-ring conductivity probe | 30276083 |
| ST3100M-N | ST3100M-B, ST230 2-in-1 refillable pH electrode, STTEMP30 temperature probe, STCON3 4-ring conductivity probe | 30332140 |

Electrodes and Sensors

| Model | Material description | Item No. |
|----------|---|----------|
| ST350 | 3 in 1 refillable pH electrode, integrated temperature probe, glass shaft | 30129354 |
| ST320 | 3 in 1 non-refillable pH electrode, gel electrolyte, integrated temperature probe, plastic shaft | 83033967 |
| ST310 | 3 in 1 refillable pH electrode, integrated temperature probe, plastic shaft | 83033965 |
| ST272 | 2-in-1 non-refillable puncture pH electrode, plastic shaft with steel head | 30393265 |
| ST270 | 2 in 1 non-refillable puncture pH electrode, glass shaft, suitable for samples such as meat, fruit etc. | 30240974 |
| ST260 | 2 in 1 pH electrode, glass shaft, double salt-bridge, suitable for Tris-buffer pH measurements | 30129357 |
| ST230 | 2 in 1 refillable pH electrode, glass shaft, suitable for muddy samples (such as milk, juice etc.) | 83033968 |
| ST210 | 2 in 1 refillable pH electrode, plastic shaft | 83033966 |
| STMICRO5 | 2 in 1 refillable pH electrode, glass shaft, 80mm length and 5mm diameter, suitable for tubes and narrow containers | 30087566 |
| STMICRO8 | 2 in 1 refillable pH electrode, glass shaft, 150mm length and 8mm diameter, suitable for tubes and narrow containers | 30087569 |
| STSURF | 2 in 1 refillable pH electrode, suitable for flat surface applications, plastic shaft | 30129470 |
| STPURE | 2 in 1 refillable pH electrode, glass shaft, suitable for water samples such as distilled water, rain water, tap water etc. | 83033969 |
| STORP1 | Non-refillable ORP electrode, gel electrolyte, plastic shaft | 30038555 |
| STORP2 | Refillable ORP electrode, glass shaft | 30038553 |
| STREF1 | Silver/silver chloride reference electrode | 30059253 |
| STTEMP30 | Temperature probe 30k Ω , stainless steel shaft, temperature range 0 – 100°C | 83033970 |
| STCON7 | 2-pole conductivity probe, integrated temperature probe, measurement range 0,02 $\mu\text{S}/\text{cm}$ – 200 $\mu\text{S}/\text{cm}$ | 30080693 |
| STCON3 | 4-ring conductivity probe, integrated temperature probe, measurement range 70 $\mu\text{S}/\text{cm}$ – 200mS/cm | 83033972 |

| Accessories | Item No. |
|--|----------|
| Buffer solution pH 1,68, 250ml | 30100424 |
| Buffer solution pH 4,01, 250ml | 30100425 |
| Buffer solution pH 6,86, 250ml | 30100426 |
| Buffer solution pH 7,00, 250ml | 30100427 |
| Buffer solution pH 9,18, 250ml | 30100428 |
| Buffer solution pH 10,01, 250ml | 30100429 |
| Buffer solution pH 12,45, 250ml | 30100440 |
| pH buffer powder set (4,01, 7,00, 10,01) | 83033971 |
| Reference electrolyte for pH electrodes (3M KCl solution saturated AgCl, 30ml) | 30059255 |
| pH electrode protection solution (3M KCl, 125ml) | 30059256 |
| Starter 3100/3100C and Starter 5000 stand-alone electrode holder | 30058733 |
| pH sensor protection bottles (package of 10) | 30064800 |
| ST3100/ST3100C in-use cover | 30058734 |
| Conductivity standard solution 10 μ S/cm, 250ml | 30100441 |
| Conductivity standard solution 84 μ S/cm, 250ml | 30100442 |
| Conductivity standard solution 1413 μ S/cm, 250ml | 30100443 |
| Conductivity standard solution 12,88 mS/cm, 250ml | 30100444 |
| ST3100/3100C and ST5000 stand-alone electrode holder | 30058733 |
| ST3100/ST3100C in-use cover | 30058734 |
| Ink Ribbon, SF40A SF42A | 12120798 |
| Paper Roll, 57,5mm, SF40A | 12120799 |
| SF40A printer | 30064202 |

Starter 2100 pH Bench

Reliable Benchtop pH Meter for Basic Laboratory Applications

- With an attached quick guide, five clearly marked keys and user-friendly software, the bench meter can be operated with minimal training.
- The built-in electrode holder provides straightforward and convenient all-in-one operation, while the large LCD display screen clearly displays results.
- Accurate results are ensured by key features like auto buffer recognition, electrode condition indicator, automatic temperature compensation and reference input.



| | |
|------------------------|---|
| Application | mV -1999~+1999 mV, pH -2,00 – 16,00, 0~100°C |
| Display | Liquid crystal display (LCD) |
| Operation | AC adapter (included) |
| Construction | ABS housing, built-in electrode holder |
| Design Features | Auto buffer recognition, two point calibration, quick reference guide |

| Model | Material description | Item No. |
|----------|---|----------|
| ST2100-B | Starter 2100 meter with built-in electrode holder | 30057494 |
| ST2100-E | Starter 2100-B, ST210 electrode, pH buffer powder set (4,01, 7,00, 10,01) | 30057495 |
| ST2100-F | Starter 2100-B, ST210 electrode, STTEMP30 temperature probe, pH buffer powder set (4,01, 7,00, 10,01) | 30057496 |

Electrodes and Sensors

| Model | Material description | Item No. |
|----------|---|----------|
| ST350 | 3 in 1 refillable pH electrode, integrated temperature probe, glass shaft | 30129354 |
| ST320 | 3 in 1 non-refillable pH electrode, gel electrolyte, integrated temperature probe, plastic shaft | 83033967 |
| ST310 | 3 in 1 refillable pH electrode, integrated temperature probe, plastic shaft | 83033965 |
| ST272 | 2-in-1 non-refillable puncture pH electrode, plastic shaft with steel head | 30393265 |
| ST270 | 2 in 1 non-refillable puncture pH electrode, glass shaft, suitable for samples such as meat, fruit etc. | 30240974 |
| ST260 | 2 in 1 pH electrode, glass shaft, double salt-bridge, suitable for Tris-buffer pH measurements | 30129357 |
| ST230 | 2 in 1 refillable pH electrode, glass shaft, suitable for muddy samples (such as milk, juice etc.) | 83033968 |
| ST210 | 2 in 1 refillable pH electrode, plastic shaft | 83033966 |
| STMICRO5 | 2 in 1 refillable pH electrode, glass shaft, 80mm length and 5mm diameter, suitable for tubes and narrow containers | 30087566 |
| STMICRO8 | 2 in 1 refillable pH electrode, glass shaft, 150mm length and 8mm diameter, suitable for tubes and narrow containers | 30087569 |
| STSURF | 2 in 1 refillable pH electrode, suitable for flat surface applications, plastic shaft | 30129470 |
| STPURE | 2 in 1 refillable pH electrode, glass shaft, suitable for water samples such as distilled water, rain water, tap water etc. | 83033969 |
| STORP1 | Non-refillable ORP electrode, gel electrolyte, plastic shaft | 30038555 |
| STORP2 | Refillable ORP electrode, glass shaft | 30038553 |
| STREF1 | Silver/silver chloride reference electrode | 30059253 |
| STTEMP30 | Temperature probe 30kΩ, stainless steel shaft, temperature range 0 – 100°C | 83033970 |

| Accessories | Item No. |
|--|----------|
| Buffer solution pH 1,68, 250ml | 30100424 |
| Buffer solution pH 4,01, 250ml | 30100425 |
| Buffer solution pH 7,00, 250ml | 30100427 |
| Buffer solution pH 10,01, 250ml | 30100429 |
| pH buffer powder set (4,01, 7,00, 10,01) | 83033971 |
| Attached electrode holder (2100) | 30058732 |
| pH sensor protection bottles (package of 10) | 30064800 |
| Reference electrolyte for pH electrodes (3M KCl solution saturated AgCl, 30ml) | 30059255 |
| pH electrode protection solution (3M KCl, 125ml) | 30059256 |

Starter 300 pH Portable

Convenient Portable pH Meter for Wherever Your Work Takes You

- Automatic and manual temperature compensation ensures accurate readings while a 30 measurement library stores data for future reference.
- The auto buffer recognition stores calibration data and helps to avoid errors during the calibration process.
- With a meter stand, wrist strap for secure field use and IP54 housing, Starter 300 is durable and prepared for versatile use.



| | |
|------------------------|--|
| Application | mV - 1999~+1999 mV, pH 0,00 - 14,00 pH, 0~100°C |
| Display | Liquid crystal display (LCD) |
| Communication | 4 AAA batteries (included) |
| Construction | ABS housing, wrist strap |
| Design Features | Automatic and manual temperature compensation, auto buffer recognition, calibration icon |

| Model | Material description | Item No. |
|---------|--|----------|
| ST300-B | Starter 300 meter, IP54 Sets, electrode clip, wrist strap and 4 AAA batteries | 83033962 |
| ST300-G | Starter 300-B, ST320 electrode, pH buffer powder set (4,01, 7,00, 10,01), bag for portable meter | 30219114 |

Electrodes and Sensors

| Model | Material description | Item No. |
|----------|---|----------|
| ST350 | 3 in 1 refillable pH electrode, integrated temperature probe, glass shaft | 30129354 |
| ST320 | 3 in 1 non-refillable pH electrode, gel electrolyte, integrated temperature probe, plastic shaft | 83033967 |
| ST310 | 3 in 1 refillable pH electrode, integrated temperature probe, plastic shaft | 83033965 |
| ST272 | 2-in-1 non-refillable puncture pH electrode, plastic shaft with steel head | 30393265 |
| ST270 | 2 in 1 non-refillable puncture pH electrode, glass shaft, suitable for samples such as meat, fruit etc. | 30240974 |
| ST260 | 2 in 1 pH electrode, glass shaft, double salt-bridge, suitable for Tris-buffer pH measurements | 30129357 |
| ST230 | 2 in 1 refillable pH electrode, glass shaft, suitable for muddy samples (such as milk, juice etc.) | 83033968 |
| ST210 | 2 in 1 refillable pH electrode, plastic shaft | 83033966 |
| STMICRO5 | 2 in 1 refillable pH electrode, glass shaft, 80mm length and 5mm diameter, suitable for tubes and narrow containers | 30087566 |
| STMICRO8 | 2 in 1 refillable pH electrode, glass shaft, 150mm length and 8mm diameter, suitable for tubes and narrow containers | 30087569 |
| STSURF | 2 in 1 refillable pH electrode, suitable for flat surface applications, plastic shaft | 30129470 |
| STPURE | 2 in 1 refillable pH electrode, glass shaft, suitable for water samples such as distilled water, rain water, tap water etc. | 83033969 |
| STORP1 | Non-refillable ORP electrode, gel electrolyte, plastic shaft | 30038555 |
| STORP2 | Refillable ORP electrode, glass shaft | 30038553 |
| STTEMP30 | Temperature probe 30kΩ, stainless steel shaft, temperature range 0 – 100°C | 83033970 |

| Accessories | Item No. |
|--|----------|
| Buffer solution pH 1,68, 250ml | 30100424 |
| Buffer solution pH 4,01, 250ml | 30100425 |
| Buffer solution pH 6,86, 250ml | 30100426 |
| Buffer solution pH 7,00, 250ml | 30100427 |
| Buffer solution pH 9,18, 250ml | 30100428 |
| Buffer solution pH 10,01, 250ml | 30100429 |
| Buffer solution pH 12,45, 250ml | 30100440 |
| pH buffer powder set (4,01, 7,00, 10,01) | 83033971 |
| Reference electrolyte for pH electrodes (3M KCl solution saturated AgCl, 30ml) | 30059255 |
| pH electrode protection solution (3M KCl, 125ml) | 30059256 |
| Portable Bag | 30031635 |

Starter 400 pH Portable

Durable, Waterproof Battery-Operated pH Meters Ideal for Field Testing!

- Built with IP67 waterproof housing as well as a rubber cover and IP67 probes, the ST400 is ideal for prolonged use in any field environment.
- Rechargeable lithium battery provides 40 hours of uninterrupted use and more than 300 charge cycles - eliminating the need to change out batteries often.
- The ST400 features intuitive software which guides the user through operation. All necessary information to run tests successfully such as electrode condition is displayed clearly on the large LCD.



| | |
|------------------------|--|
| Application | pH, Oxidation-Reduction Potential (ORP) measurement |
| Display | Backlit Liquid Crystal Display (LCD) |
| Operation | Rechargeable lithium battery |
| Communication | Built-in micro-USB port |
| Construction | IP67 waterproof plastic housing, IP67 probes, rubber cover |
| Design Features | Data storage of up to 1000 items |

| Modèle | Description | Référence |
|---------|---|-----------|
| ST400-B | Starter 400 Meter with IP67 rubber housing, electrode clip, wrist strap and 4 AAA Batteries | 30468964 |
| ST400-F | ST400-B, ST320 IP67 3m Probe, pH buffer powder set (4,01, 7,00, 10,01) | 30468965 |
| ST400-G | ST400-F, portable bag | 30468966 |

Electrodes and Sensors

| Modèle | Description | Référence |
|------------------|---|-----------|
| ST320 IP67 3m | 3 in 1 non-refillable pH electrode, gel electrolyte, integrated temperature probe, plastic shaft, with IP67 connectors and 3m cable | 30468960 |

Other OHAUS pH electrodes might be used with ST400M and ST400 but in such case the system will not be IP67 protected. Any damage caused by water or dust ingress will not fall under warranty.

| Accessoires | Référence |
|--|-----------|
| Buffer solution pH 1,68, 250ml | 30100424 |
| Buffer solution pH 4,01, 250ml | 30100425 |
| Buffer solution pH 6,86, 250ml | 30100426 |
| Buffer solution pH 7,00, 250ml | 30100427 |
| Buffer solution pH 9,18, 250ml | 30100428 |
| Buffer solution pH 10,01, 250ml | 30100429 |
| Buffer solution pH 12,45, 250ml | 30100440 |
| pH buffer powder set (4,01, 7,00, 10,01) | 83033971 |
| pH electrode protection solution (3M KCl, 125ml) | 30059256 |
| pH sensor protection bottles (package of 10) | 30064800 |
| Portable Bag | 30031635 |

Starter 300C Conductivity Portable

Convenient Portable Conductivity Meter for Wherever Your Work Takes You

- Starter 300C has a built-in temperature sensor and a 4-pole linear electrode that safeguards itself from polarization and pollution effects.
- With a simple calibration process and quick delivery of measurement results, Starter 300C is efficient and easy-to-use.
- The 30 item library allows the user to easily recall calibration data and stored information with one quick touch.



| | |
|------------------------|--|
| Application | Conductivity 0,0 $\mu\text{S}/\text{cm}$ ~199,9 mS/cm, TDS 0,1 mg/L~199,9 g/L, 0~100°C |
| Display | Liquid crystal display (LCD) |
| Operation | 4 AAA batteries (included) |
| Construction | ABS housing, wrist strap |
| Design Features | Automatic temperature compensation, adjustable temperature coefficient |

| Model | Material description | Item No. |
|----------|--|----------|
| ST300C-B | Starter 300C meter, conductivity standards 1413 $\mu\text{S}/\text{cm}$ and 12,88mS/cm (20ml bottles), IP54 Sets, Electrode Clip, Wrist Strap, 4 AAA Batteries | 30092000 |
| ST300C-G | ST300C-B, STCON3 4-Ring Conductivity Electrode (70 $\mu\text{S}/\text{cm}$ - 200 mS/cm), Portable Bag | 30219115 |

Electrodes and Sensors

| Model | Material description | Item No. |
|--------|---|----------|
| STCON7 | 2-pole conductivity probe, integrated temperature probe, measurement range 0,02 $\mu\text{S}/\text{cm}$ – 200 $\mu\text{S}/\text{cm}$ | 30080693 |
| STCON3 | 4-ring conductivity probe, integrated temperature probe, measurement range 70 $\mu\text{S}/\text{cm}$ – 200mS/cm | 83033972 |

| Accessories | Item No. |
|---|----------|
| Conductivity standard solution 10 $\mu\text{S}/\text{cm}$, 250ml | 30100441 |
| Conductivity standard solution 84 $\mu\text{S}/\text{cm}$, 250ml | 30100442 |
| Conductivity standard solution 1413 $\mu\text{S}/\text{cm}$, 250ml | 30100443 |
| Conductivity standard solution 12,88 mS/cm, 250ml | 30100444 |
| Portable Bag | 30031635 |

Starter 400D DO Portable

The Low-Maintenance Dissolved Oxygen (DO) Meter with Optical Technology for Accurate Measurements

- Optical or Luminescent DO Probe allows for minimal maintenance and permits for immediate measurement reading without the need for warm up time or any sample preparation
- Large bright backlit LCD screen provides easy to read results even low light areas with 5 dedicated manual keys the delivers simple straightforward operation for all operators via a simple calibration process and accurate measurements
- With a meter stand, wrist strap for secure field use and IP54 housing, Starter 400D is durable and prepared for versatile use



| | |
|------------------------|---|
| Application | Field and lab Dissolved Oxygen measurement |
| Display | Colour LCD |
| Operation | 4 AAA batteries |
| Construction | Housing Material ABS |
| Design Features | Auto barometric pressure measurement, auto temperature compensation with manual salinity compensation assures the accuracy of the measurement |

| Model | Material description | Item No. |
|----------|--|----------|
| ST400D-B | Starter 400D optical DO meter, IP54 sets, wrist strap, electrode clip, 4 AAA batteries | 30378541 |
| ST400D-G | Starter 400D-B, STDO21 probe, bag for portable meter | 30378542 |

Electrodes and Sensors

| Model | Accessories | Item No. |
|--------|--|----------|
| STDO21 | Optical Dissolved Oxygen (DO) probe STDO21, 1m cable | 30378544 |
| STDO21 | Optical Dissolved Oxygen (DO) probe STDO21, 5m cable | 30378545 |

| Accessories | Item No. |
|----------------------------------|----------|
| Probe cap replacement for STDO21 | 30253566 |
| Portable Bag | 30031635 |

Starter 400M Multi-Parameter Portable

Durable, Waterproof Battery-Operated Multi-Parameter Meters Ideal for Field Testing!

- Built with IP67 waterproof housing as well as a rubber cover and IP67 probes, the ST400M is ideal for prolonged use in any field environment.
- Rechargeable lithium battery provides 40 hours of uninterrupted use and more than 300 charge cycles - eliminating the need to change out batteries often.
- The ST400M features intuitive software which guides the user through operation. All necessary information to run tests successfully such as electrode condition is displayed clearly on the large LCD.



| | |
|------------------------|--|
| Application | pH, Conductivity, TDS, Salinity and Resistivity Testing |
| Display | Backlit Liquid Crystal Display (LCD) |
| Operation | Rechargeable lithium battery |
| Communication | Built-in micro-USB port |
| Construction | IP67 waterproof plastic housing, IP67 probes, rubber cover |
| Design Features | Data storage of up to 1000 items |

| Modèle | Description | Référence |
|----------|--|-----------|
| ST400M-B | Starter 400M Meter with IP67 rubber housing, electrode clip, wrist strap and 4 AAA Batteries | 30468990 |
| ST400M-F | ST400M-B, ST320 IP67 3m Probe, STCON3 IP67 3m, pH buffer powder set (4,00, 7,00, 10,01) | 30468991 |
| ST400M-G | ST400M-F, portable bag | 30468992 |

Electrodes and Sensors

| Modèle | Description | Référence |
|----------------|---|-----------|
| ST320 IP67 3m | 3 in 1 non-refillable pH electrode, gel electrolyte, integrated temperature probe, plastic shaft, with IP67 connectors and 3m cable | 30468960 |
| STCON3 IP67 3m | 4-ring conductivity probe, integrated temperature probe, measurement range 2µS/cm - 70µS/cm (accuracy 0,5%) and 70µS/cm - 200µS/cm (accuracy 1-5%), with IP67 connectors and 3m cable | 30468962 |

Other OHAUS pH electrodes might be used with ST400M and ST400 but in such case the system will not be IP67 protected. Any damage caused by water or dust ingress will not fall under warranty. Other conductivity probes from our existing portfolio cannot be used with ST400M.

| Accessoires | Référence |
|---|-----------|
| Buffer solution pH 1,68, 250ml | 30100424 |
| Buffer solution pH 4,01, 250ml | 30100425 |
| Buffer solution pH 6,86, 250ml | 30100426 |
| Buffer solution pH 7,00, 250ml | 30100427 |
| Buffer solution pH 9,18, 250ml | 30100428 |
| Buffer solution pH 10,01, 250ml | 30100429 |
| Buffer solution pH 12,45, 250ml | 30100440 |
| pH buffer powder set (4,01, 7,00, 10,01) | 83033971 |
| pH electrode protection solution (3M KCl, 125ml) | 30059256 |
| pH sensor protection bottles (package of 10) | 30064800 |
| Conductivity standard solution 10 µS/cm, 250ml | 30100441 |
| Conductivity standard solution 84 µS/cm, 250ml | 30100442 |
| Conductivity standard solution 500 µS/cm, 250ml | 30393269 |
| Conductivity standard solution 1413 µS/cm, 250ml | 30100443 |
| Conductivity standard solution 12,88 mS/cm, 250ml | 30100444 |
| Portable Bag | 30031635 |

Starter 300D DO Portable

Convenient Portable Dissolved Oxygen Meter for Wherever Your Work Takes You

- The galvanic electrode can be used immediately after being powered on without the wait time typically associated with dissolved oxygen meters.
- With a simple calibration process, quick delivery of measurements and automatic temperature compensation, Starter 300D is both easy-to-use and accurate.
- The automatic or manual endpoints allow the user to easily recall the last calibration data and stored information with one quick touch.

| | |
|------------------------|-----------------------------------|
| Application | Dissolved oxygen (DO) measurement |
| Display | Liquid crystal display (LCD) |
| Operation | 4 AAA batteries (included) |
| Construction | ABS housing, wrist strap |
| Design Features | 30 measurement memory |

| Model | Material description | Item No. |
|----------|--|----------|
| ST300D-B | Starter 300D meter, IP54 sets, wrist strap, electrode clip, 4 AAA batteries | 30031656 |
| ST300D-G | Starter 300D-B, STDO11 probe, STTEMP30 temperature probe, bag for portable meter | 30219116 |

Electrodes and Sensors

| Model | Material description | Item No. |
|----------|---|----------|
| STTEMP30 | Temperature probe 30k Ω , stainless steel shaft, temperature range 0 – 100°C | 83033970 |
| STDO11 | Galvanic Dissolved Oxygen (DO) probe, plastic shaft | 30031639 |

| Accessories | Item No. |
|-----------------------|----------|
| DO Zero Oxygen powder | 30059257 |
| Portable Bag | 30031635 |

Starter Pen Meters

Accurate Electrochemistry Measurement At Your Fingertips

- Starter pen meters provide what should be expected of a small, economical pen meter: simple, fast, straightforward, no-frills operation time and time again.
- With durable ABS housing, a protective sensor cap, and automatic shutdown feature that preserves battery life, Starter pen meters can endure consistent use in rugged environments.
- Equipped with a wrist strap that prevents unintentional dropping, Starter pen meters feature an IP67 waterproof design that can prevent water damage when dropped into liquid.



ST20M-B

ST10T-B

ST20

| | |
|------------------------|---|
| Application | pH, oxidation-reduction potential (ORP), conductivity, dissolved oxygen (DO), salinity, total dissolved solids (TDS), temperature measurement |
| Display | Liquid crystal display (LCD) display with secondary information line (on select models) |
| Operation | 4 1,5V batteries (included) |
| Construction | ABS Housing |
| Design Features | Easily replaceable electrodes, automatic shut off feature |

| Model | Material description | Item No. |
|---------|--|----------|
| ST10 | pH pen meter, resolution 0,1 pH | 30073970 |
| ST20 | pH pen meter, resolution 0,01 pH, temperature display | 30073971 |
| ST10C-A | Conductivity pen meter, measurement range 0,0 – 199,9µS/cm | 30073972 |
| ST10C-B | Conductivity pen meter, measurement range 0,0 – 1999µS/cm | 30073973 |
| ST10C-C | Conductivity pen meter, measurement range 0,0 – 19,99mS/cm | 30073974 |
| ST20C-A | Conductivity pen meter, measurement range 0,0 – 199,9µS/cm, temperature display | 30073975 |
| ST20C-B | Conductivity pen meter, measurement range 0,0 – 1999µS/cm, temperature display | 30073976 |
| ST20C-C | Conductivity pen meter, measurement range 0,0 – 19,99mS/cm, temperature display | 30073977 |
| ST10T-A | TDS pen meter, measurement range 0,0 – 100mg/L | 30073978 |
| ST10T-B | TDS pen meter, measurement range 0,0 – 1000mg/L | 30073979 |
| ST20T-A | TDS pen meter, measurement range 0,0 – 100mg/L, temperature display | 30073980 |
| ST20T-B | TDS pen meter, measurement range 0,0 - 1000mg/L, temperature display | 30073981 |
| ST10S | Salinity pen meter, measurement range 0,0 – 10,0ppt | 30073982 |
| ST20S | Salinity pen meter, measurement range 0,0 – 80ppt, temperature display | 30073983 |
| ST10R | ORP pen meter, measurement range -1000mV to 1000mV | 30073984 |
| ST20R | ORP pen meter, measurement range -1000mV to 1000mV, temperature display | 30073985 |
| ST20D | DO pen meter, polarographic, measurement range 0,0 to 19,9 mg/L, temperature display | 30073986 |
| ST20M-B | ST20M-B Multi Parameter Pen Meter | 30393199 |
| ST20M-C | ST20M-C Multi Parameter Pen Meter | 30393200 |

Electrodes and Sensors

| Material description | Item No. |
|---|----------|
| Replaceable pH electrode compatible with ST10 pen meter | 30087992 |
| Replaceable pH electrode compatible with ST20 pen meter | 30087993 |
| Replaceable probe compatible with ST10C-A and ST10T-A pen meters | 30087994 |
| Replaceable probe compatible with ST10C-B and ST10T-B pen meters | 30087995 |
| Replaceable probe compatible with ST10C-C and ST10S pen meters | 30087996 |
| Replaceable protbe compatible with ST20C-A and ST20T-A pen meters | 30087997 |
| Replaceable probe compatible with ST20C-B and ST20T-B pen meters | 30087998 |
| Replaceable probe compatible with ST20C-C and ST20S pen meters | 30087999 |
| Replaceable electrode compatible with ST10R pen meter | 30088020 |
| Replaceable electrode compatible with ST20R pen meter | 30088021 |
| Replaceable probe for ST20D | 30222083 |
| Replaceable electrode for ST20M-B | 30393203 |
| Replaceable electrode for ST20M-C | 30393204 |

Starter Electrodes and Sensors

OHAUS Precision Powers the Starter Electrodes

- All sturdy and durable electrodes are constructed of either plastic or glass shafts and built to withstand daily use.
- All 3 in 1 electrodes include a temperature sensor, which powers automatic temperature compensation and ensures accurate measurements.
- All electrodes fit perfectly in the electrode holders on OHAUS bench meters and electrode clips on all OHAUS portable meters.



| | |
|------------------------|--|
| Application | pH, reference, oxidation-reduction potential (ORP), conductivity, dissolved oxygen (DO), temperature measurement |
| Construction | Metal, glass, or plastic shaft |
| Design Features | Can be used in conjunction with all Starter bench, portable or pen meters |

| Model | Material description | Item No |
|----------|---|----------|
| ST350 | 3 in 1 refillable pH electrode, integrated temperature probe, glass shaft | 30129354 |
| ST320 | 3 in 1 non-refillable pH electrode, gel electrolyte, integrated temperature probe, plastic shaft | 83033967 |
| ST310 | 3 in 1 refillable pH electrode, integrated temperature probe, plastic shaft | 83033965 |
| ST272 | 2-in-1 non-refillable puncture pH electrode, plastic shaft with steel head | 30393265 |
| ST270 | 2 in 1 non-refillable puncture pH electrode, glass shaft, suitable for samples such as meat, fruit etc. | 30240974 |
| ST260 | 2 in 1 pH electrode, glass shaft, double salt-bridge, suitable for Tris-buffer pH measurements | 30129357 |
| ST230 | 2 in 1 refillable pH electrode, glass shaft, suitable for muddy samples (such as milk, juice etc.) | 83033968 |
| ST210 | 2 in 1 refillable pH electrode, plastic shaft | 83033966 |
| STMICRO5 | 2 in 1 refillable pH electrode, glass shaft, 80mm length and 5mm diameter, suitable for tubes and narrow containers | 30087566 |
| STMICRO8 | 2 in 1 refillable pH electrode, glass shaft, 150mm length and 8mm diameter, suitable for tubes and narrow containers | 30087569 |
| STSURF | 2 in 1 refillable pH electrode, suitable for flat surface applications, plastic shaft | 30129470 |
| STPURE | 2 in 1 refillable pH electrode, glass shaft, suitable for water samples such as distilled water, rain water, tap water etc. | 83033969 |
| STORP1 | Non-refillable ORP electrode, gel electrolyte, plastic shaft | 30038555 |
| STORP2 | Refillable ORP electrode, glass shaft | 30038553 |
| STREF1 | Silver/silver chloride reference electrode | 30059253 |
| STDO11 | Galvanic Dissolved Oxygen (DO) probe, plastic shaft | 30031639 |
| STDO21 | Optical Dissolved Oxygen (DO) probe STDO21, 1m cable | 30378545 |
| STCON3 | 4-ring conductivity probe, integrated temperature probe, measurement range 70µS/cm – 200mS/cm | 83033972 |
| STCON7 | 2-pole conductivity probe, integrated temperature probe, measurement range 0,02µS/cm – 200µS/cm | 30080693 |
| STTEMP30 | Temperature probe 30kΩ, stainless steel shaft, temperature range 0 – 100°C | 83033970 |
| pH10 ST | Replaceable pH electrode compatible with ST10 pen meter | 30087992 |
| pH20 ST | Replaceable pH electrode compatible with ST20 pen meter | 30087993 |
| CT10A ST | Replaceable probe compatible with ST10C-A and ST10T-A pen meters | 30087994 |
| CT10B ST | Replaceable probe compatible with ST10C-B and ST10T-B pen meters | 30087995 |
| CS10C ST | Replaceable probe compatible with ST10C-C and ST10S pen meters | 30087996 |
| CT20A ST | Replaceable probe compatible with ST20C-A and ST20T-A pen meters | 30087997 |
| CT20B ST | Replaceable probe compatible with ST20C-B and ST20T-B pen meters | 30087998 |
| CS20C ST | Replaceable probe compatible with ST20C-C and ST20S pen meters | 30087999 |
| R10 ST | Replaceable electrode compatible with ST10R pen meter | 30088020 |
| R20 ST | Replaceable electrode compatible with ST20R pen meter | 30088021 |
| DO20 ST | Replaceable probe for ST20D | 30222083 |

| Accessories | Item No. |
|--|----------|
| Reference electrolyte for pH electrodes (3M KCl solution saturated AgCl, 30ml) | 30059255 |
| pH electrode protection solution (3M KCl, 125ml) | 30059256 |
| pH sensor protection bottles (package of 10) | 30064800 |
| Membrane Kit, Replaceable, ST20D | 30222084 |
| Electrode Protection Cap | 30472285 |

Across™ Pro Pipette

Pipettes that Combine Accuracy, Comfort and Durability•

- Durably constructed to be stable, sturdy, and tolerate consistent use as well as contact with hazardous or harsh solutions, Across Pro pipettes are built to last.
- A stainless steel piston as well as a design that limits thermal conductivity come together to produce accurate, reliable, and repeatable liquid measurement with each use.
- Designed for maximum comfort, an ergonomic finger hook, light plunger force, and low-drag seals limit discomfort typically associated with the repetitive use of pipettes.



| | |
|------------------------|--|
| Application | Pipetting |
| Display | 3-digit micrometer |
| Construction | PVDF housing, stainless steel piston, ergonomic finger hook |
| Design Features | Highly chemical and shock resistant, low thermal conductivity, light plunger force, low-drag seals |

| Model | Material description | Item No. |
|------------|--|----------|
| AO-2 EN | Accurate premium pipette, half-autoclavable, volume range 0,1 – 2µL | 30079258 |
| AO-10 EN | Accurate premium pipette, half-autoclavable, volume range 0,5 – 10µL | 30079259 |
| AO-20 EN | Accurate premium pipette, half-autoclavable, volume range 2 – 20µL | 30079260 |
| AO-100 EN | Accurate premium pipette, half-autoclavable, volume range 10 – 100µL | 30079261 |
| AO-200 EN | Accurate premium pipette, half-autoclavable, volume range 20 – 200µL | 30079262 |
| AO-1000 EN | Accurate premium pipette, half-autoclavable, volume range 100 – 1000µL | 30079263 |
| AO-5000 EN | Accurate premium pipette, half-autoclavable, volume range 500 – 5000µL | 30079264 |
| AO-10ML EN | Accurate premium pipette, half-autoclavable, volume range 1 – 10ml | 30079265 |

| Accessories | Item No. |
|---------------|----------|
| Pipette Stand | 30206893 |

LabJaws Clamps & Supports

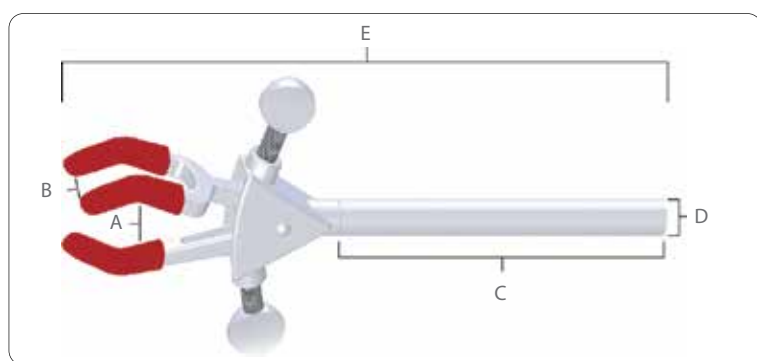


*Multi Purpose Clamps
Specialty Clamps
Connectors and Holders
Rods, Frames, and Supports
Flow Control Clamps
Misc. Non-Electrical Products*

Multi-Purpose Clamps

A LabJaws Clamp for Every Application - Choose From Over 85 Options to Hold Everything In Your Lab

- Corrosion-resistant stainless steel clamps provide excellent chemical resistance, durability, and can be autoclaved. Nickel-plated zinc clamps offer high-tensile strength at an economical price.
- Prevent accidents in the lab - versatile multi-purpose LabJaws clamps securely hold glassware and irregularly-shaped objects. Select from a variety of grip sizes, prong styles, and adjustment types.
- Choose from a variety of specialized LabJaws clamps with adjustable features to provide an exact fit for labware such as thermometers, thermocouples, columns, funnels, and round bottom flasks.



Single Adjust Clamps



Dual Adjust Clamps



Ground Glass Joint Reference Chart

| Clamp | Joint Size |
|--------------------|---|
| Small Dual Adjust | 10/30, 12/30, 14/20, 19/22, 24/40, 29/42, 34/45 |
| Medium Dual Adjust | 14/40, 19/38 |
| Large Dual Adjust | 45/50 |

3-Prong Single Adjust Clamps

| Model | Size | (A) Min. to Max Grip Size | (B) Prong Width | (C) Arm Length | (D) Arm Dia. | (E) Overall Length | Item No |
|---------------|--------|---------------------------|-----------------|----------------|--------------|--------------------|----------|
| CLM-ULTRA3SZS | Small | 0 to 23 mm | 6 mm | 102 mm | 8 mm | 162 mm | 30392254 |
| CLM-ULTRA3SZM | Medium | 0 to 50 mm | 19 mm | 127 mm | 11 mm | 229 mm | 30392252 |
| CLM-ULTRA3SZL | Large | 0 to 72 mm | 29 mm | 127 mm | 11 mm | 260 mm | 30392250 |

3-Prong Dual Adjust Clamps

| Model | Size | (A) Min. to Max Grip Size | (B) Prong Width | (C) Arm Length | (D) Arm Dia. | (E) Overall Length | Item No |
|---------------|--------|---------------------------|-----------------|----------------|--------------|--------------------|----------|
| CLM-ULTRA3DZS | Small | 0 to 32 mm | 6 mm | 102 mm | 8 mm | 152 mm | 30392253 |
| CLM-ULTRA3DZM | Medium | 0 to 70 mm | 19 mm | 127 mm | 11 mm | 222 mm | 30392251 |
| CLM-ULTRA3DZL | Large | 0 to 103 mm | 29 mm | 127 mm | 11 mm | 260 mm | 30392249 |

Multi-Purpose Clamps

Heavy-Duty Tapered Clamps

Heavy-Duty, 4-prong, dual adjust tapered clamps are designed to hold large vessels with ground glass joint necks. Clamps are constructed with extension rods for easy attachment to lab-frames and other apparatus. Nickel-plated zinc construction.

NOTE: An additional holder must be purchased in order to attach clamps to frames or other apparatus.

See the Connectors & Holders section of this catalog, pages 103-105.



30392194

| Model | Size | Joint Size | Prong Width | Arm Length | Arm Dia. | Overall Length | Item No |
|---------------|-------|------------|-------------|------------|----------|----------------|----------|
| CLM-HDCLP4DZS | Small | 24/40 mm | 16 mm | 229 mm | 13 mm | 356 mm | 30392193 |
| CLM-HDCLP4DZL | Large | 34/45 mm | 19 mm | 229 mm | 13 mm | 381 mm | 30392194 |

Multi-Purpose Clamps

- Stainless steel, electro-polished finish
- Large dual adjustment range
- Available in three sizes; small, medium, and large

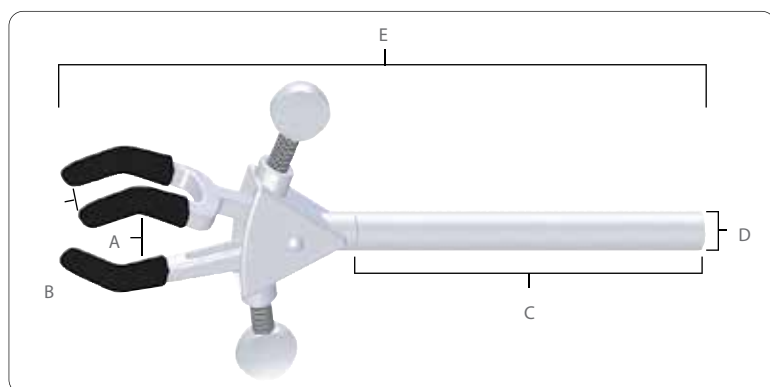
These durable, multi-purpose clamps are made entirely of stainless steel with an electro-polished finish and offer excellent chemical resistance and overall strength. The versatile 3-prong design secures various lab apparatus such as jointed glassware, columns, flasks, and tubes. Dual prong adjustments offer a wide range of motion. Long stainless steel extension arm offers easy positioning and depth adjustment. Autoclavable. Supplied with non-slip vinyl sleeves and, for temperatures above 100°C, fiberglass covers.

NOTE: An additional holder must be purchased in order to attach clamps to frames or other apparatus.

See the Connectors & Holders section of this catalog, pages 103-105.



30392352



3-Prong Stainless Steel Dual Adjust Clamps

| Model | Size | (A) Min. to Max Grip Size | (B) Prong Width | (C) Arm Length | (D) Arm Dia. | (E) Overall Length | Item No |
|---------------|--------|---------------------------|-----------------|----------------|--------------|--------------------|----------|
| CLM-MULTI3DSS | Small | 0 to 48 mm | 13 mm | 102 mm | 10 mm | 172 mm | 30392354 |
| CLM-MULTI3DSM | Medium | 0 to 69 mm | 19 mm | 127 mm | 13 mm | 229 mm | 30392353 |
| CLM-MULTI3DSL | Large | 0 to 102 mm | 29 mm | 127 mm | 13 mm | 273 mm | 30392352 |

Multi-Purpose Clamps

3-Prong Multi-Purpose Clamps

- Large grip adjustment range
- 3-prong construction
- Single or dual adjust
- Nickel-plated zinc

Designed to securely hold every type of laboratory glassware and apparatus. Long, seamless nickel-plated brass tubing attaches clamp head securely and offers easy positioning in the deepest fume hoods. Clamps are constructed with round extension arms, which allow the clamps to be rotated 360°. Extension arms also allow placement of apparatus at various distances from lab-frames without compromising the integrity of your experiment. Supplied with non-slip vinyl sleeves and, for temperatures above 100°C, fiberglass covers.

NOTE: An additional holder must be purchased in order to attach clamps to frames or other apparatus.

See the Connectors & Holders section of this catalog, pages 103-105.

3-Prong Single Adjust Clamps

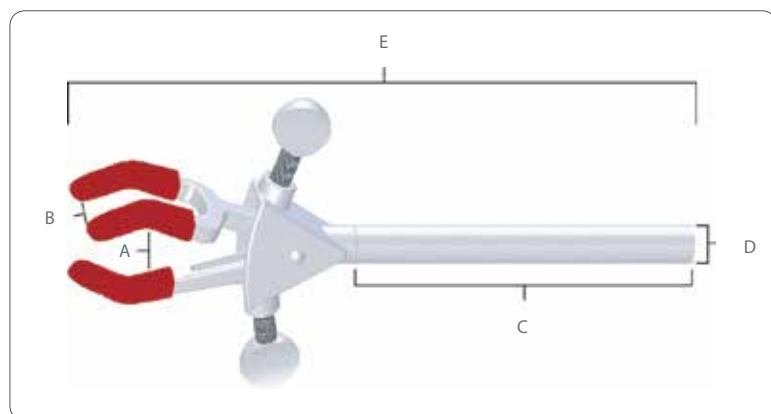


30392200

3-Prong Dual Adjust Clamps



30392198



3-Prong Single Adjust Clamps

| Model | Size | (A) Min. to Max Grip Size | (B) Prong Width | (C) Arm Length | (D) Arm Dia. | (E) Overall Length | Item No |
|---------------|--------|---------------------------|-----------------|----------------|--------------|--------------------|----------|
| CLM-MULTI3SZS | Small | 0 to 39 mm | 11 mm | 102 mm | 8 mm | 160 mm | 30392205 |
| CLM-MULTI3SZM | Medium | 0 to 71 mm | 19 mm | 127 mm | 11 mm | 218 mm | 30392203 |
| CLM-MULTI3SZL | Large | 0 to 108 mm | 29 mm | 127 mm | 11 mm | 248 mm | 30392200 |

3-Prong Dual Adjust Clamps

| Model | Size | (A) Min. to Max Grip Size | (B) Prong Width | (C) Arm Length | (D) Arm Dia. | (E) Overall Length | Item No |
|---------------|-------------------|---------------------------|-----------------|----------------|--------------|--------------------|----------|
| CLM-MULTI3DZS | Small | 0 to 46 mm | 11 mm | 102 mm | 8 mm | 168 mm | 30392204 |
| CLM-MULTI3DZM | Medium | 0 to 69 mm | 19 mm | 127 mm | 11 mm | 229 mm | 30392201 |
| CLM-MLTEX3DZM | Medium (extended) | 0 to 69 mm | 19 mm | 305 mm | 13 mm | 406 mm | 30392202 |
| CLM-MULTI3DZL | Large | 0 to 105 mm | 29 mm | 127 mm | 11 mm | 273 mm | 30392198 |
| CLM-MLTEX3DZL | Large (extended) | 0 to 105 mm | 29 mm | 305 mm | 13 mm | 451 mm | 30392199 |

Multi-Purpose Clamps

2-Prong Multi-Purpose Clamps

- Stainless steel electro-polished finish or nickel-plated zinc
- Large grip adjustment range
- 2-prong construction
- Single or dual adjust

Designed to securely hold laboratory glassware and apparatus. Extension arm attaches clamp head securely and offers easy positioning in the deepest fume hoods. Clamps are constructed with round extension arms, which allow the clamps to be rotated 360°. Extension arms also allow placement of apparatus at various distances from lab-frames without compromising the integrity of your experiment. Stainless steel clamps are electro-polished and made entirely of stainless steel. They offer exceptional chemical resistance and are autoclavable. Nickel-plated zinc offers a clamp with a high tensile strength at an economical price. Supplied with non-slip vinyl sleeves and, for temperatures above 100°C, fiberglass covers.

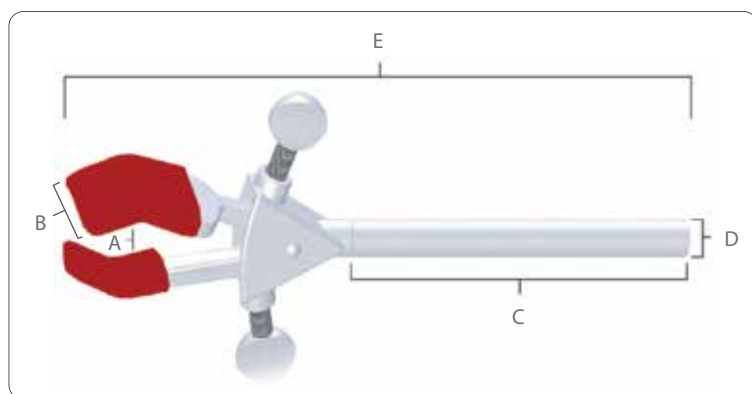
NOTE: An additional holder must be purchased in order to attach clamps to frames or other apparatus.

See the Connectors & Holders section of this catalog, pages 103-105.

2-Prong Single Adjust Clamps



2-Prong Dual Adjust Clamps



2-Prong Single Adjust Clamps

| Model | Material | Size | (A) Min. to Max Grip Size | (B) Prong Width | (C) Arm Length | (D) Arm Dia. | (E) Overall Length | Item No |
|---------------|--------------------|--------|---------------------------|-----------------|----------------|--------------|--------------------|----------|
| CLM-MULTI2SZM | Nickel-plated zinc | Medium | 0 to 78 mm | 23 mm | 127 mm | 11 mm | 216 mm | 30392208 |
| CLM-MULTI2SZL | Nickel-plated zinc | Large | 0 to 92 mm | 23 mm | 127 mm | 11 mm | 229 mm | 30392206 |

2-Prong Dual Adjust Clamps

| Model | Material | Size | (A) Min. to Max Grip Size | (B) Prong Width | (C) Arm Length | (D) Arm Dia. | (E) Overall Length | Item No |
|---------------|--------------------|--------|---------------------------|-----------------|----------------|--------------|--------------------|----------|
| CLM-MULTI2DSM | Stainless steel | Medium | 0 to 75 mm | 23 mm | 127 mm | 11 mm | 229 mm | 30392220 |
| CLM-MULTI2DZM | Nickle-plated zinc | Medium | 0 to 75 mm | 23 mm | 127 mm) | 11 mm | 229 mm | 30392209 |
| CLM-MULTI2DSL | Stainless steel | Large | 0 to 95 mm | 23 mm | 127 mm | 11 mm | 248 mm | 30392223 |
| CLM-MULTI2DZL | Nickle-plated zinc | Large | 0 to 95 mm | 23 mm | 127 mm | 11 mm | 248 mm | 30392207 |

Multi-Purpose Clamps

Swivel Clamps

Used to hold apparatus near the lab-frame. Unlike extension clamps, the swivel clamps have an integral holder for attaching to a lab-frame or other apparatus. Built-in holder grips rods up to 19 mm in diameter and is adjustable for forward or reverse-facing adjustment screws. Shaft wing-nut allows the holding angle of the swivel clamp to adjust through 360° of rotation and can be locked in place once desired position is achieved. Stainless steel electro-polished finish or nickel-plated zinc construction. Supplied with non-slip vinyl sleeves and, for temperatures above 100°C, fiberglass covers.



| Model | Material | Description | Size | Min. to Max. Grip Size | Prong Width | Overall Length | Item No |
|---------------|--------------------|-----------------------|--------|------------------------|-------------|----------------|----------|
| CLM-SWIVL2SSM | Stainless steel | 2-Prong Single Adjust | Medium | 0 to 76 mm | 23 mm | 163 mm | 30392226 |
| CLM-SWIVL2SZM | Nickel-plated zinc | 2-Prong Single Adjust | Medium | 0 to 76 mm | 23 mm | 163 mm | 30392215 |
| CLM-SWIVL2SZL | Nickel-plated zinc | 2-Prong Single Adjust | Large | 0 to 95 mm | 23 mm | 180 mm | 30392216 |
| CLM-SWIVL3DSM | Stainless steel | 3-Prong Dual Adjust | Medium | 0 to 69 mm | 20 mm | 178 mm | 30392225 |
| CLM-SWIVL3DZM | Nickel-plated zinc | 3-Prong Dual Adjust | Medium | 0 to 69 mm | 20 mm | 178 mm | 30392214 |

Fixed-Position Clamps

Used to hold apparatus near the lab-frame where no adjustment is required after set-up. Built-in holder grips rods up to 19 mm in diameter. Fixed-Position Clamps have an integral holder but can be rotated after attachment to a lab-frame or other apparatus. Available in 2-prong or 3-prong. Stainless steel electro-polished finish or nickel-plated zinc construction. Supplied with non-slip vinyl sleeves and, for temperatures above 100°C, fiberglass covers.



| Model | Material | Description | Size | Min. to Max. Grip Size | Prong Width | Overall Length | Item No |
|---------------|--------------------|-----------------------|--------|------------------------|-------------|----------------|----------|
| CLM-FIXED2SSM | Stainless steel | 2-Prong Single Adjust | Medium | 0 to 77 mm | 23 mm | 133 mm | 30392230 |
| CLM-FIXED2SZM | Nickel-plated zinc | 2-Prong Single Adjust | Medium | 0 to 77 mm | 23 mm | 133 mm | 30392218 |
| CLM-FIXED3DSM | Stainless steel | 3-Prong Dual Adjust | Medium | 0 to 69 mm | 20 mm | 146 mm | 30392229 |
| CLM-FIXED3DZM | Nickel-plated zinc | 3-Prong Dual Adjust | Medium | 0 to 69 mm | 20 mm | 146 mm | 30392217 |

Specialty Clamps

Thermometer Swivel Clamp

Holds glass tubes and thermometers 114 mm from support rod. Clamp features safety adjust spring plate jaws that adjust to any angle with locking wing-nut. Built-in holder grips rods up to 19 mm in diameter. Lightweight, rust, and corrosion-resistant. Nickel-plated construction.

| Model | Min. to Max. Grip Size | Overall Length | Item No |
|------------|------------------------|----------------|----------|
| CLS-THMSWZ | 6 to 8 mm | 159 mm | 30392238 |



Thermometer / Thermocouple Extension Clamp

Lightweight clamp holds glass tubing, thermometers or thermocouples up to 178 mm from support rod. Tightening wing-nut applies tension to the nickel-plated jaws.

NOTE: An additional holder must be purchased in order to attach clamps to frames or other apparatus.

See the Connectors & Holders section of this catalog, pages 103-105.

| Model | Min. to Max. Grip Size | Ext Arm Length | Arm Dia. | Overall Length | Item No |
|------------|------------------------|----------------|----------|----------------|----------|
| CLS-THMEXZ | 6 to 12 mm | 127 mm | 11 mm | 210 mm | 30392239 |



Wall Clamp

Ideal for securing fermentation tubes, burets or other small objects to walls where no frames are available. Integral self-tapping screw secures clamp to wall. Nickel-plated construction.

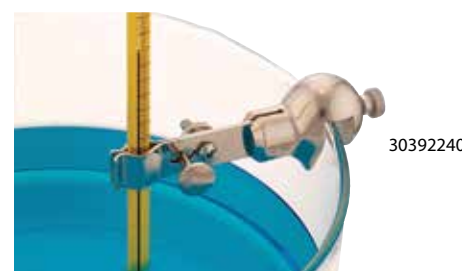
| Model | Min. to Max. Grip Size | Overall Length | Item No | Price \$ |
|------------|------------------------|----------------|----------|----------|
| CLS-WALLCZ | 5 to 10 mm | 80 mm | 30392244 | |



Water Bath Clamps

Holds a variety of apparatus, including glass tubes and thermometers onto glass water bath walls. Built-in holder grips walls of varying thickness, up to 9 mm. Knurled thumbscrew tightens jaws to hold objects firmly. Nickel-plated zinc construction. Large water bath clamp is supplied with non-slip vinyl sleeves and, for temperatures above 100°C, fiberglass covers.

| Model | Size | Min. to Max. Grip Size | Prong Width | Overall Length | Item No |
|-------------|-------|------------------------|-------------|----------------|----------|
| CLS-WBATHZS | Small | 5 to 10 mm | N/A | 89 mm | 30392240 |
| CLS-WBATHZL | Large | 0 to 46 mm | 11 mm | 117 mm | 30392241 |



Specialty Clamps

For the items listed below an additional holder must be purchased in order to attach clamps to frames or other apparatus. See the Connectors & Holders section of this catalog, pages 103-105.

Chain Clamps

Holds large round or irregular shaped objects firmly, yet gently, to lab-frames and rods. Quick and secure slip-on chain connection with large, easy-to-turn adjusting knob. Extension arm allows user to vary distance from the frame. Available as stainless steel clamp, constructed entirely of stainless steel with electro-polished finish or nickel-plated zinc clamp with strong, chromed-brass chain.

Stainless Steel

| Model | Size | Min. to Max. Dia. | Ext. Arm Length | Arm Dia. | Overall Length | Item No |
|-------------|---------|-------------------|-----------------|----------|----------------|----------|
| CLS-CHAINSL | Large-5 | 35 to 280 mm | 127 mm | 13 mm | 206 mm | 30392224 |

Nickel-Plated Zinc

| Model | Size | Min. to Max. Dia. | Ext. Arm Length | Arm Dia. | Overall Length | Item No |
|-------------|----------|-------------------|-----------------|----------|----------------|----------|
| CLS-CHAINZM | Small | 35 to 170 mm | 127 mm | 13 mm | 188 mm | 30392235 |
| CLS-CHAINZL | Large-5 | 35 to 280 mm | 127 mm | 13 mm | 206 mm | 30392259 |
| CLS-CHNEXZL | Large-12 | 35 to 280 mm | 305 mm | 13 mm | 384 mm | 30392260 |



30392224

Column Clamps

These sturdy, easily adjusted, multi-purpose clamps are ideal for holding large cylindrical glassware and similar objects. A large, flat thumbscrew/worm-drive permits maximum tightening or removal in minimum time. Clamp is constructed of corrosion-resistant stainless steel. Ideal for chromatography columns.

| Model | Size | Min. to Max. Dia. | Ext. Arm Length | Arm Dia. | Overall Length | Item No |
|-------------|---------|-------------------|-----------------|----------|----------------|----------|
| CLS-COLMNSS | Small | 65 to 89 mm | 211 mm | 11 mm | 282 mm | 30392314 |
| CLS-COLMNSM | Medium | 91 to 114 mm | 211 mm | 11 mm | 315 mm | 30392315 |
| CLS-COLMNSL | Large | 64 to 140 mm | 211 mm | 11 mm | 338 mm | 30392316 |
| CLS-COLMNSX | X-Large | 92 to 165 mm | 211 mm | 11 mm | 368 mm | 30392317 |



30392316

Nester Extension Clamps

Securely holds large or small glass distillation columns and odd-shaped glassware. Constructed of stainless steel with strong, chromed-brass band and chain.

| Model | Min. to Max. Dia. | Ext. Arm Length | Arm Dia. | Overall Length | Item No |
|------------|-------------------|-----------------|----------|----------------|----------|
| CLS-NESTXS | 50 to 102 mm | 152 mm | 10 mm | 262 mm | 30392318 |



30392318

PVC Coated Open Extension Rings

Ideal for supporting funnels, round bottom flasks, reaction vessels, and other apparatus that require lower support. Opening in PVC coated aluminium ring allows for easy removal of sample container. PVC coating protects glassware. Long extension arm permits depth adjustment of the open ring from the lab-frame or ring stand.

| Model | Ring Dia. | Ext. Arm Length | Arm Dia. | Overall Length | Item No |
|-------------|-----------|-----------------|----------|----------------|----------|
| CLS-OPENRPS | 76 mm | 254 mm | 9 mm | 328 mm | 30392346 |
| CLS-OPENRPM | 102 mm | 305 mm | 9 mm | 404 mm | 30392347 |
| CLS-OPENRPL | 127 mm | 305 mm | 11 mm | 427 mm | 30392348 |



30392347

Open Rings

Lightweight rings mount funnels, boiling flasks, and other irregular shaped objects to lab-frames. Open ring section allows items to pass in and out of support area easily, reducing risk of breakage. Aluminium construction.

| Model | Ring Dia. | Ext. Arm Length | Arm Dia. | Overall Length | Item No |
|-------------|-----------|-----------------|----------|----------------|----------|
| CLS-OPENRAS | 76 mm | 58 mm | 9 mm | 132 mm | 30392343 |
| CLS-OPENRAM | 102 mm | 58 mm | 9 mm | 158 mm | 30392344 |
| CLS-OPENRAL | 127 mm | 61 mm | 11 mm | 183 mm | 30392345 |



30392345

Specialty Clamps

Buret Holders

Stainless steel electro-polished finish or nickel-plated zinc construction. Double Buret Clamp holds any size buret from micro to 100 ml capacity. Simply compress the scissor-like mechanism, insert buret and gently release to grip. Numbers and graduation on buret remain easy to read. For height adjustments, recompress mechanism and slide buret up or down and gently release. Clamp unit with built-in reinforced hook connector attaches to optional standard support rod. Adjusting nut faces forward for easy use. Stainless steel or aluminium support rod attaches to optional porcelain base.

Support Rod (Dia. × L): 13 × 578 mm

Porcelain Base (L × W × H): 178 × 330 × 25 mm

Stainless Steel

| Model | Description | Item No |
|------------|--|----------|
| CLS-BTDBLS | Double Buret Clamp (only) | 30392227 |
| CLS-RODS | Support Rod (only) | 30392233 |
| CLS-STRODS | Support Stand with Rod | 30392232 |
| CLS-BTSETS | Double Buret Clamp & Support Stand with Rod (complete) | 30392231 |



Nickel-Plated Zinc

| Model | Description | Item No |
|------------|--|----------|
| CLS-BTDBLZ | Double Buret Clamp (only) | 30392234 |
| CLS-STRODA | Support Stand with Rod | 30392312 |
| CLS-BTSETA | Double Buret Clamp & Support Stand with Rod (complete) | 30392313 |



Kettle Clamps

Holds flask and cover together firmly. Three insulated spring-activated clamping arms. Stainless steel springs. For use on reaction kettles.

| Model | Flask Size | Inside Dia. | Item No |
|------------|---------------------------|-------------|----------|
| CLS-KTLCLS | 500 ml, 1000 ml | 125 mm | 30392365 |
| CLS-KTLCLM | 2000 ml, 3000 ml, 4000 ml | 142 mm | 30392366 |



Electrode Support Clamp

Permits suspension of electrodes over beaker for potentiometric titrations. Holds any electrode clamp at desired level. Built-in nickel-plated zinc holder grips rods up to 19 mm in diameter.

| Model | Overall Length | Item No |
|------------|----------------|----------|
| CLS-ELECTZ | 178 mm | 30392242 |



Suspension Clamp

Holds thermometers, potash bulbs or drying tubes 114 mm from support rod. Machine tapered, nickel-plated brass hook won't bend, rust, or corrode. Built-in holder grips rods up to 19 mm in diameter.

| Model | Overall Length | Item No |
|------------|----------------|----------|
| CLS-SUSPNB | 137 mm | 30392243 |



Support Clamp

Supports electrolysis apparatus, glass rods or tubing at any angle. Arms are nickel-plated brass with vinyl coating. Easily supports cylindrical objects up to 19 mm in diameter. Built-in holder grips rods up to 19 mm in diameter.

| Model | Overall Length | Prong Width | Item No |
|------------|----------------|-------------|----------|
| CLS-SPPRTB | 152 mm | 25 mm | 30392237 |



Specialty Clamps

Ultra Flex Support Systems have unique flexible arms that are extremely versatile and can be placed in virtually any position or angle. Ultra Flex comes in three different systems; base plate, lab-frame connector, and bench clamp. Each system includes a 2-Prong Clamp Head, 3-Prong Clamp Head, Spring Clamp Head, nickel-plated flex arm in 305 mm or 457 mm length, and utility wrench. 2-prong and 3-prong clamp heads also supplied with non-slip vinyl sleeves and, for temperatures above 100°C, fiberglass covers.

| | | |
|----------------|---|-------------------------|
| Arm Length | Ultra Flex 12 Ultra Flex 18 | 305 mm 457 mm |
| Arm Diameter | | 13 mm |
| Max. Grip Size | 2-Prong Clamp Head 3-Prong Clamp Head Spring Clamp Head | 75 mm 69 mm 13 mm |

2-Prong Clamp Head



3-Prong Clamp Head



Spring Clamp Head



Ultra Flex Support System with Base Plate

OHAUS Ultra Flex Support System with Base Plate is constructed of all metal and designed with a stable, painted steel base plate with chemical resistant black finish that fits easily on bench tops or in fume hoods. Base plate measures 127 × 127 × 12,7 mm.

| Model | Description | Item No |
|------------|-------------------------------|----------|
| CLS-FLEXSM | Ultra Flex 12 with Base Plate | 30400011 |
| CLS-FLEXSL | Ultra Flex 18 with Base Plate | 30400014 |



30400014

Ultra Flex Support System with Lab-Frame Connector

Ultra Flex Support System with Lab-Frame Connector securely attaches to support stands, lab-frames, or any support rod up to 19 mm in diameter. Ideal for use in fume hoods. Lab-frame connector is made of cast alloy.

| Model | Description | Item No |
|------------|--|----------|
| CLS-FLEXLM | Ultra Flex 12 with Lab-Frame Connector | 30400013 |
| CLS-FLEXLL | Ultra Flex 18 with Lab-Frame Connector | 30400016 |



30400013

Ultra Flex Support System with Bench Clamp

Ultra Flex Support System with Bench Clamp easily attaches to the side of your lab bench or counter top, which helps utilize more space in your lab. Bench clamp is constructed of aluminium.

| Model | Description | Item No |
|------------|--------------------------------|----------|
| CLS-FLEXBM | Ultra Flex 12 with Bench Clamp | 30400012 |
| CLS-FLEXBL | Ultra Flex 18 with Bench Clamp | 30400015 |



30400015

Specialty Clamps

Bench Clamp

Aluminium bracket with arm fastens quickly and firmly to any convenient shelf. Accepts 13 mm rods vertically and horizontally, to which ordinary rings and clamps attach, leaving bench surface clear for apparatus.

| Model | Clamp Opening | Depth of Grip | Overall Length | Item No |
|------------|---------------|---------------|----------------|----------|
| CLC-SHGRPA | 43 mm | 51 mm | 197 mm | 30392311 |



30392311

Thumbscrew Knob

Thumbscrew tightening knob features a 32 mm slot in the center of a nylon disc that will accept thumbscrews supplied with the LabJaws and UltraJaws Multi-Purpose Clamps, excluding the stainless steel version. Makes tightening of clamps easier on the hands and wrists.

| Model | Overall Diameter | Thumbscrew Slot | Item No |
|-----------|------------------|-----------------|----------|
| CLM-TKNOB | 64 mm | 32 mm | 30392192 |



30392192

Double Jaw Utility Clamp

Swivels 360° and locks securely in desired position. These 2-prong clamps have a medium and a large clamp on each end. Nickel-plated zinc construction. Supplied with non-slip vinyl sleeves and, for temperatures above 100°C, fiberglass covers.

| Model | Description | Min. to Max. Grip Size | Prong Width | Overall Length | Item No |
|------------|----------------|------------------------|-------------|----------------|----------|
| CLS-DBJAWZ | Medium 2-Prong | 0 to 76 mm | 23 mm | 222 mm | 30392236 |



30392236

Accessories

| Description | Item No |
|-------------------------------------|----------|
| Medium 2 Prong Sleeves, Vinyl | 30400253 |
| Medium 2 Prong Sleeves, Fiberglass | 30400254 |
| Large 2 Prong Sleeves, Vinyl | 30400255 |
| Large 2 Prong Sleeves, Fiberglass | 30400256 |
| Small 3 Prong Sleeves, Vinyl | 30400257 |
| Small 3 Prong Sleeves, Fiberglass | 30400258 |
| Medium 3 Prong Sleeves, Vinyl | 30400259 |
| Medium 3 Prong Sleeves, Fiberglass | 30400260 |
| Large 3 Prong Sleeves, Vinyl | 30400261 |
| Large 3 Prong Sleeves, Fiberglass | 30400262 |
| Small 3 Prong Sleeves, Vinyl Black | 30400263 |
| Medium 3 Prong Sleeves, Vinyl Black | 30400264 |
| Large 3 Prong Sleeves, Vinyl Black | 30400265 |

Connectors & Holders

Regular Holder

Stainless steel electro-polished finish or nickel-plated zinc construction. Ideal for holding clamps to lab-frames. Use wherever clamping at 90° is required.

| Model | Material | Min. to Max. Grip Size | Item No |
|------------|--------------------|------------------------|----------|
| CLC-REGLRS | Stainless steel | 0 to 18 mm | 30392219 |
| CLC-REGLRZ | Nickel-plated zinc | 0 to 18 mm | 30392197 |



30392219

Jumbo Holder

Stainless steel electro-polished finish or aluminium construction. Ideal for holding clamps to lab-frames or ring stands.

| Model | Material | Min. to Max. Grip Size | Item No |
|------------|-----------------|------------------------|----------|
| CLC-JUMBOS | Stainless steel | 0 to 21 mm | 30392357 |
| CLC-JUMBOA | Aluminium | 0 to 21 mm | 30392196 |



30392357

Heavy-Duty Holder

For mounting stirrers and other apparatus. Holder is constructed of strong aluminium alloy; fitted with oversized knobs for very secure positioning. Rods supported on 102 mm long surface to avoid vibration and wobble.

| Model | Material | Min. to Max. Grip Size | Item No |
|------------|-----------|------------------------|----------|
| CLC-ULTRAA | Aluminium | 6 to 24 mm | 30400045 |



30400045

Swivel Holder

Two rod holders with center swivel capacity allow tilting of clamps at any angle in parallel planes. Outside adjustment screw allows close proximity between items being held. Stainless steel electro-polished or nickel-plated zinc construction.

| Model | Material | Min. to Max. Grip Size | Item No |
|------------|--------------------|------------------------|----------|
| CLC-SWIVLS | Stainless steel | 0 to 19 mm | 30392228 |
| CLC-SWIVLZ | Nickel-plated zinc | 0 to 19 mm | 30392213 |

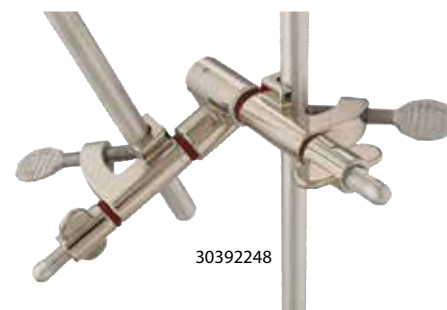


30392228

All-Position Clamp Holder

Surpasses standard holding capabilities. The all-position clamp holder permits adjustment at any angle in any plane. Holders are set at 90° to each other, connected by a 90° connector, allowing 360° rotation. Nickel-plated zinc construction.

| Model | Material | Min. to Max. Grip Size | Item No |
|------------|--------------------|------------------------|----------|
| CLC-ALLPSZ | Nickel-plated zinc | 0 to 19 mm | 30392248 |



30392248

Clamp Holder

Clamp is ideal for gripping 2 rods at 90°. Oversized thumbscrews make securing rods fast and easy.

| Model | Material | Min. to Max. Grip Size | Overall Length | Item No |
|------------|-----------|------------------------|----------------|----------|
| CLC-CLMPHA | Aluminium | 0 to 17 mm | 70 mm | 30392195 |



30392195

Connectors & Holders

Hook Connector

Stainless steel electro-polished finish or nickel-plated zinc construction. Simple, versatile, and easy-to-use. Hook connectors allow one-handed assembly of two components with one adjustment screw.

| Model | Material | Min. to Max. Grip Size | Item No |
|------------|--------------------|------------------------|----------|
| CLC-HOOKCS | Stainless steel | 0 to 13 mm | 30392358 |
| CLC-HOOKCZ | Nickel-plated zinc | 0 to 13 mm | 30392258 |



30392358

End-to-End Connector

Extend the length of lab-frame rods. Strong aluminium alloy connector permits end-to-end joining of rods. Precision boring of connector ensures perfect alignment of rods. Corrosion resistant. Comes with two set screws.

| Model | Material | Min. to Max. Grip Size | Item No |
|------------|-----------|------------------------|----------|
| CLC-EN2ENA | Aluminium | 0 to 13 mm | 30392264 |



30392264

Rod End Connector

Holds rods firmly at 90°. Use when semi-permanent installations are required. Comes with two set screws and is precision bored for close fit. Stainless steel electro-polished finish or nickel-plated zinc construction.

| Model | Material | Min. to Max. Grip Size | Item No |
|------------|--------------------|------------------------|----------|
| CLC-RDENDS | Stainless steel | 0 to 13 mm | 30392222 |
| CLC-RDENDZ | Nickel-plated zinc | 0 to 13 mm | 30392256 |



30392222

S-Connector

Stainless steel electro-polished finish or nickel-plated zinc construction. Clamp is ideal for constructing lab-frames or other supports requiring the connection of two perpendicular rods. Clamp connects two 13 mm rods at a 90° angle and features separate adjustment screws for each rod location.

| Model | Material | Min. to Max. Grip Size | Item No |
|------------|--------------------|------------------------|----------|
| CLC-SCONNS | Stainless steel | 0 to 13 mm | 30392355 |
| CLC-SCONNZ | Nickel-plated zinc | 0 to 13 mm | 30392257 |



30392355

Frame Connector (Pack of 12)

Improved contour delivers simplicity and strength. Angled adjustment screws allow easy set-up and prevents misalignment. Smooth, rounded surfaces are easy-to-clean. Small size maximizes lab-frame space. Bright dipped aluminium finish sealed with silicon for maximum protection against corrosion.

| Model | Material | Min. to Max. Grip Size | Item No | |
|------------|-----------|------------------------|----------|--------|
| CLC-LTTCEA | Aluminium | 0 to 13 mm | 30392255 | 175,50 |



30392255

Connectors & Holders

Universal Stirrer Mounting Bracket

Use to mount stirrers and other devices to lab-frames. Aluminium mounting bracket with attachment screws.

| Model | Max. Weight Mounted | Min. to Max. Grip Size | Item No |
|------------|---------------------|------------------------|----------|
| CLC-UNSMBA | 2,27 kg | 0 to 20 mm | 30392265 |



Multi-Rod Connector

Maximum adjustment capability within one connector. Two adjustment rods fit into the oval hole in the connector, preventing turning when tightened. Side and front 13 mm holes allow creation of a variety of configurations. Nickel-plated zinc construction.

| Model | Min. to Max. Rod Size | Item No |
|-----------|-----------------------|----------|
| CLC-MTODZ | 0 to 13 mm | 30392262 |



Wrench

Special adjusting wrench is for use with lab-frame items with set screws.

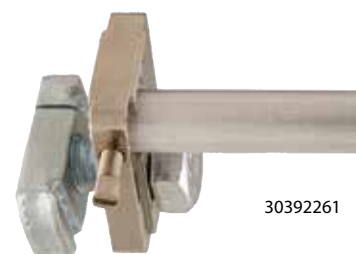
| Model | Length | Item No |
|-----------|--------|----------|
| CLC-WRNCH | 79 mm | 30392270 |



Channel Connector

Special connector fastens lab-frame rod to steel 41 mm channels. Loosen the connector and slide up or down for easy adjustment of rod position.

| Model | Dimensions | Item No |
|------------|------------|----------|
| CLC-CHANLZ | 33 x 40 mm | 30392261 |



Horizontal Mounting Bars with Coupler

Threaded end for direct installation into channels. Comes with spring coupler for use in steel 41 mm channels. Locking nut included. Use with steel channel frames.

| Model | Bar Length | Item No |
|--------------|------------|----------|
| CLC-HTZMBA05 | 51 mm | 30392266 |
| CLC-HTZMBA10 | 102 mm | 30392267 |
| CLC-HTZMBA15 | 152 mm | 30392268 |
| CLC-HTZMBA20 | 203 mm | 30392269 |



Rods, Frames, & Supports

A LabJaws Clamp for Every Application - Choose From Over 85 Options to Hold Everything In Your Lab

- Corrosion-resistant lab-frames, rods, and connectors are available in premium stainless steel offering high chemical-resistance and durability. Aluminium offers reliable strength at a lighter weight.
- Simplify lab set up - 13 lab-frame kit options are available with four designed to fit in fume hoods. Build your own support system choosing from a wide selection of rods, bases, and connectors.
- Lab-lifts are convenient adjustable lifting platforms. Exceptional strength and durability for holding small lab equipment such as glassware, hot plates, and water baths at different heights.

Lab Frame Foot

Stainless steel electro-polished finish or nickel-plated zinc construction. Strong, durable lab-frame foot is designed for mounting lab-frames permanently to bench tops, fume hoods, walls, and floors. Spilled fluids roll right off the smooth body contour, minimizing contamination and easing clean-ups. Features a set screw and includes three 19 mm mounting screws.



30392356

| Model | Material | Min. to Max. Grip Size | Dimensions (Dia. x H) | Item No |
|------------|--------------------|------------------------|-----------------------|----------|
| CLR-LFOOTS | Stainless steel | 0 to 13 mm | 58 x 32 mm | 30392356 |
| CLR-LFOOTZ | Nickel-plated zinc | 0 to 13 mm | 58 x 32 mm | 30392263 |

Frame Rods

Everything you need to customize a lab-frame to your laboratory space. Quality construction throughout. Frame rods are available in many lengths and materials.

Aluminium

Center-less ground for a precise fit. These hard aluminium rods provide a smooth fit with lab-frames.

Corrosion resistant with chamfered ends for easy location.

Stainless Steel

Heavy-duty, top-of-the-line rods provide maximum strength and durability.

Constructed of 303 stainless steel.



Aluminium



Stainless steel

| Model | Material | Rod Diameter | Rod Length | Item No |
|-------------|-----------------|--------------|------------|----------|
| CLR-RODA004 | Aluminium | 13 mm | 41 mm | 30392271 |
| CLR-RODA005 | Aluminium | 13 mm | 51 mm | 30392272 |
| CLR-RODA015 | Aluminium | 13 mm | 152 mm | 30392273 |
| CLR-RODA030 | Aluminium | 13 mm | 305 mm | 30392274 |
| CLR-RODA046 | Aluminium | 13 mm | 457 mm | 30392275 |
| CLR-RODA061 | Aluminium | 13 mm | 610 mm | 30392276 |
| CLR-RODA091 | Aluminium | 13 mm | 914 mm | 30392277 |
| CLR-RODA122 | Aluminium | 13 mm | 1219 mm | 30392278 |
| CLR-RODA152 | Aluminium | 13 mm | 1524 mm | 30392279 |
| CLR-RODA183 | Aluminium | 13 mm | 1829 mm | 30392280 |
| CLR-RODA244 | Aluminium | 13 mm | 2438 mm | 30392281 |
| CLR-RODS004 | Stainless Steel | 13 mm | 41 mm | 30392293 |
| CLR-RODS005 | Stainless Steel | 13 mm | 51 mm | 30392294 |
| CLR-RODS015 | Stainless Steel | 13 mm | 152 mm | 30392295 |
| CLR-RODS030 | Stainless Steel | 13 mm | 305 mm | 30392296 |
| CLR-RODS046 | Stainless Steel | 13 mm | 457 mm | 30392297 |
| CLR-RODS061 | Stainless Steel | 13 mm | 610 mm | 30392298 |
| CLR-RODS091 | Stainless Steel | 13 mm | 914 mm | 30392299 |
| CLR-RODS122 | Stainless Steel | 13 mm | 1219 mm | 30392300 |
| CLR-RODS152 | Stainless Steel | 13 mm | 1524 mm | 30392301 |
| CLR-RODS183 | Stainless Steel | 13 mm | 1829 mm | 30392302 |
| CLR-RODS244 | Stainless Steel | 13 mm | 2438 mm | 30392303 |

Rods, Frames, & Supports

LabJaws offers the widest choice of standard lab frames available, plus the accessories to custom-fit any laboratory with the right frame for the job. Standard Lab-Frame sets are available in five sizes. Options of traditional center-less ground aluminium, non-corroding fiberglass, or tough stainless steel rods are available. Nickel-plated zinc connectors and lab-frame feet are standard with all kits.

Small Lab-Frame

Vertical mounting, great for glassware set-ups in small laboratories or where space is limited. Frame measures 610 × 610 mm. Base is 457 mm wide for stability. Base may be permanently mounted to bench top with screws (included).

Components:

- (8) 51 mm Rods
- (2) 457 mm Rods
- (8) 610 mm Rods
- (18) S-Connectors
- (4) Rod End Connectors
- (4) Lab-Frame Feet

| Model | Material | Frame Dimensions | Base Dimensions | Item No |
|-------------|-----------------|------------------|-----------------|----------|
| CLR-FRAMEAS | Aluminium | 61 × 61 cm | 457 mm wide | 30392304 |
| CLR-FRAMESS | Stainless Steel | 61 × 61 cm | 457 mm wide | 30392323 |



Medium Lab-Frame

Horizontal or vertical mounting, convenient for distillation or general set-up. Frame measures 610 × 1219 mm. Base is 457 mm wide for stability.

Components:

- (8) 51 mm Rods
- (2) 457 mm Rods
- (7) 610 mm Rods
- (4) 1219 mm Rods
- (35) S-Connectors
- (4) Rod End Connectors
- (4) Lab-Frame Feet

| Model | Material | Frame Dimensions | Base Dimensions | Item No |
|-------------|-----------------|------------------|-----------------|----------|
| CLR-FRAMEAM | Aluminium | 610 × 1219 mm | 457 mm wide | 30392305 |
| CLR-FRAMESM | Stainless Steel | 610 × 1219 mm | 457 mm wide | 30392324 |



Rods, Frames, & Supports

Large Lab-Frame

This 1219 × 1219 mm frame is ideal for complex glassware set-ups. Base is 457 mm wide for stability.

Components:

- (10) 51 mm Rods
- (3) 457 mm Rods
- (2) 914 mm Rods
- (10) 1219 mm Rods
- (38) S-Connectors
- (4) Rod End Connectors
- (6) Lab-Frame Feet



| Model | Material | Frame Dimensions | Base Dimensions | Item No |
|-------------|-----------------|------------------|-----------------|----------|
| CLR-FRAMEAL | Aluminium | 1219 × 1219 mm | 457 mm wide | 30392306 |
| CLR-FRAMESL | Stainless Steel | 1219 × 1219 mm | 457 mm wide | 30392325 |

Extra-Large Lab-Frame

Versatile, adaptable Extra-Large Lab-Frame measures 1219 × 1829 mm and may be used either horizontally or vertically.

Components:

- (6) 51 mm rods
- (6) 305 mm rods
- (2) 610 mm rods
- (7) 1219 mm rods
- (5) 1829 mm rods
- (45) S-Connectors
- (4) Rod End Connectors
- (8) Lab-Frame Feet



| Model | Material | Frame Dimensions | Item No | |
|-------------|-----------------|------------------|----------|----------|
| CLR-FRAMEAX | Aluminium | 1219 × 1829 mm | 30392307 | 1 025,00 |
| CLR-FRAMESX | Stainless Steel | 1219 × 1829 mm | 30392326 | 1 425,00 |

Rods, Frames, & Supports

Heavy-Duty Lab-Frame

Floor mounted, free-standing unit is specifically designed for heavy-duty work such as pilot plant set-ups. Outside frame is constructed of a strong, but lightweight steel channel. Interior lattice uses a horizontal channel connector; one end accommodates the rod, the other end fits into the channel and locks tightly with a bolt. Loosen the bolt, and the connector slides easily along the channel track for simple lattice adjustment. Entire apparatus is supported on sturdy, counter-weighted cast iron feet, which may be bolted to the floor for added stability required in top-heavy installations.

Components:

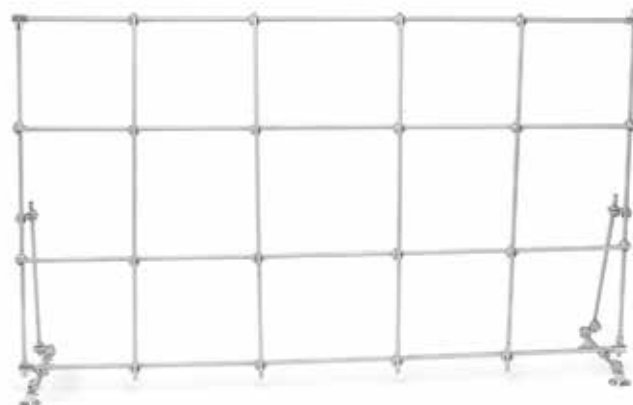
- (5) 1219 mm rods
- (3) 1829 mm rods
- (15) S-Connectors
- (16) Channel Connectors
- (24) Clamping Nuts
- (2) 551 mm Cast Iron Feet
- (1) Frame Kit
- (1) Wrench



| Model | Material | Frame Dimensions | Overall Dimensions | Item No |
|-------------|-----------------|------------------|--------------------|----------|
| CLR-FRAMEAH | Aluminium | 1219 × 1829 mm | 1905 × 1829 mm | 30392309 |
| CLR-FRAMESH | Stainless Steel | 1219 × 1829 mm | 1905 × 1829 mm | 30392328 |

Fume Hood Kits

Choose from four kits specifically designed to fit within laboratory fume hoods. All components are constructed of stainless steel with the exception of the Frame Connectors which are made of aluminium with a silicon finish.



| Model | | | | |
|---|----------|--|--|---|
| 1,22 m Fume Hood Kit | | 1,52 m Fume Hood Kit | 1,83 m Fume Hood Kit | 2,44 m Fume Hood Kit |
| Components: | | Components: | Components: | Components: |
| <ul style="list-style-type: none"> • (8) 51 mm rods • (2) 305 mm rods • (2) 457 mm rods • (4) 914 mm rods • (4) 965 mm rods • (30) Frame Connectors • (4) Rod End Connectors • (4) Lab-Frame Feet | | <ul style="list-style-type: none"> • (8) 51 mm rods • (2) 305 mm rods • (2) 457 mm rods • (5) 914 mm rods • (4) 1270 mm rods • (34) Frame Connectors • (4) Rod End Connectors • (4) Lab-Frame Feet | <ul style="list-style-type: none"> • (8) 51 mm rods • (2) 305 mm rods • (2) 457 mm rods • (6) 914 mm rods • (4) 1575 mm rods • (38) Frame Connectors • (4) Rod End Connectors • (4) Lab-Frame Feet | <ul style="list-style-type: none"> • (10) 51 mm rods • (3) 305 mm rods • (2) 457 mm rods • (8) 914 mm rods • (4) 2184 mm rods • (45) Frame Connectors • (4) Rod End Connectors • (6) Lab-Frame Feet |
| Frame: 914 × 965 mm | | Frame: 914 × 1270 mm | Frame: 914 × 1575 mm | Frame: 914 × 2184 mm |
| Base: 305 mm wide | | Base: 305 mm wide | Base: 305 mm wide | Base: 305 mm wide |
| Item No | 30392329 | 30392330 | 30392331 | 30392332 |

Rods, Frames, & Supports

Support Stands

Support Stands are made entirely of 303 stainless steel. They have a durable base that can accommodate vessels up to 457 mm in diameter within the "U". The base area is 451 mm across × 267 mm deep overall. The stainless steel support rod is 16 mm in diameter and is screwed to the support base. Two additional threaded holes in the base legs accommodate rods, enabling the stand to support two mixers. The "U" shape of the base should be turned from the mixing apparatus when the two outside rods are in use. This balances the weight, preventing the base from tipping.

| Model | Description | Item No |
|---------------|--------------------------------|----------|
| CLR-STRODS058 | Support Stand with 584 mm Rod | 30400030 |
| CLR-STRODS071 | Support Stand with 711 mm Rod | 30400031 |
| CLR-STRODS091 | Support Stand with 914 mm Rod | 30400032 |
| CLR-STRODS102 | Support Stand with 1016 mm Rod | 30400033 |
| CLR-STRODS122 | Support Stand with 1219 mm Rod | 30400034 |
| CLR-STRODS152 | Support Stand with 1524 mm Rod | 30400035 |



Support Stand

Support Stand Stabilizer Knobs

Support Stand Stabilizer Knobs can be added to the two additional threaded holes in the base legs to secure the stand to a bench top.

| Model | Description | Item No |
|-----------|---|----------|
| CLR-SKNOB | Support Stand Stabilizer Knobs (2 per pack) | 30400044 |



Support Stand Stabilizer Knobs

Heavy-Duty Support Stands

Heavy-Duty Support Stands have a four point cast iron base with stainless steel support rod. They are designed to accommodate vessels up to 30.5 cm in diameter to sit close to the support rod. They have rubber cushions on each of the four corners. The base area is 41,9 cm across × 30,5 cm deep overall. They are ideal for Heavy-Duty Mixers, page 43.

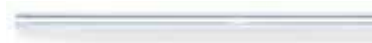
| Model | Description | Item No |
|---------------|---|----------|
| CLR-STRODC046 | Heavy-Duty Support Stand with 457 mm Rod | 30392334 |
| CLR-STRODC058 | Heavy-Duty Support Stand with 584 mm Rod | 30392335 |
| CLR-STRODC071 | Heavy-Duty Support Stand with 711 mm Rod | 30392336 |
| CLR-STRODC091 | Heavy-Duty Support Stand with 914 mm Rod | 30392337 |
| CLR-STRODC102 | Heavy-Duty Support Stand with 1016 mm Rod | 30392338 |
| CLR-STRODC122 | Heavy-Duty Support Stand with 1219 mm Rod | 30392339 |
| CLR-STRODC152 | Heavy-Duty Support Stand with 1524 mm Rod | 30392340 |



Heavy-Duty Support Stand

Replacement Support Rods

| Model | Description | Diameter | Item No |
|---------------|-----------------------------|----------|----------|
| CLR-SPRODS046 | 457 mm Stainless Steel Rod | 16 mm | 30400036 |
| CLR-SPRODS058 | 584 mm Stainless Steel Rod | 16 mm | 30400037 |
| CLR-SPRODS071 | 711 mm Stainless Steel Rod | 16 mm | 30400038 |
| CLR-SPRODS091 | 914 mm Stainless Steel Rod | 16 mm | 30400039 |
| CLR-SPRODS102 | 1016 mm Stainless Steel Rod | 16 mm | 30400040 |
| CLR-SPRODS122 | 1219 mm Stainless Steel Rod | 16 mm | 30400041 |
| CLR-SPRODS152 | 1524 mm Stainless Steel Rod | 16 mm | 30400042 |



Replacement Support Rods

Rods, Frames, & Supports

Cast Iron Support Stands

Cast iron support stand bases are constructed with black enamel finish for chemical resistance and durability. All bases feature a built-in support rod holder with locking knob that accepts a 13 mm diameter support rod. U-shaped base features three built-in support rod holders and accommodates vessels up to 127 mm in diameter.

Note: Support rods are not included.

Rectangular Base Support Stand, Cast Iron

| Model | Description | Dimensions | Item No |
|-------------|-------------------------|--------------|----------|
| CLR-RBASECS | Rectangular Base (only) | 102 × 152 mm | 30392359 |
| CLR-RBASECM | Rectangular Base (only) | 127 × 203 mm | 30392360 |
| CLR-RBASECL | Rectangular Base (only) | 152 × 229 mm | 30392361 |
| CLR-RBASECX | Rectangular Base (only) | 203 × 254 mm | 30392362 |



Tripod Base Support Stand, Cast Iron

| Model | Description | Overall Footprint Diameter | Item No |
|------------|--------------------|----------------------------|----------|
| CLR-TBASEC | Tripod Base (only) | 375 mm | 30392363 |



U-Shaped Base Support Stand, Cast Iron

| Model | Description | Dimensions | Item No |
|------------|----------------------|--------------|----------|
| CLR-UBASEC | U-Shaped Base (only) | 178 × 178 mm | 30392364 |



Aluminium Support Rods

| Model | Description | Diameter | Item No |
|-------------|----------------------|----------|----------|
| CLR-RODA030 | 305 mm Aluminium Rod | 13 mm | 30392274 |
| CLR-RODA046 | 457 mm Aluminium Rod | 13 mm | 30392275 |
| CLR-RODA061 | 610 mm Aluminium Rod | 13 mm | 30392276 |
| CLR-RODA091 | 914 mm Aluminium Rod | 13 mm | 30392277 |



Stainless Steel Support Rods

| Model | Description | Diameter | Item No |
|-------------|----------------------------|----------|----------|
| CLR-RODS030 | 305 mm Stainless Steel Rod | 13 mm | 30392296 |
| CLR-RODS046 | 457 mm Stainless Steel Rod | 13 mm | 30392297 |
| CLR-RODS061 | 610 mm Stainless Steel Rod | 13 mm | 30392298 |
| CLR-RODS091 | 914 mm Stainless Steel Rod | 13 mm | 30392299 |



Rods, Frames, & Supports

Round Support Plate

Aluminium plate supports beakers, mantles and petri dishes. Fits standard lab-frames using connectors or holders, shown on pages 103-105.

| Model | Description | Distance from Rod | Item No |
|-------------|-------------|-------------------|----------|
| CLR-PLATEAR | 152 mm | 66 mm | 30392342 |



Support Plates

Designed to hold hotplates, stirrers, hotplate-stirrers, and other apparatus to lab-frames or ring stands. Aluminium construction offers strength and durability. Support plates include a non-skid rubber mat and a built-in holder that grips rods up to 19 mm in diameter.

| Model | Size | Plate Dimensions | Distance from Rod | Item No |
|-------------|--------|------------------|-------------------|----------|
| CLR-PLATEAS | Small | 241 × 165 mm | 48 mm | 30392349 |
| CLR-PLATEAL | Medium | 324 × 229 mm | 48 mm | 30392350 |
| CLR-PLATEAX | Large | 400 × 305 mm | 48 mm | 30392351 |



Rods, Frames, & Supports

OHAUS Aluminium Lab-Lifts

- Exceptional stability and durability
- Aluminium construction
- Three convenient sizes

Aluminium Lab-Lifts provide stable height adjustment for various items in the lab such as flasks, baths, and small equipment. Top and bottom decks are constructed of anodized aluminium. Internal supports and drive screws are constructed of stainless steel. Oversized sure-grip adjustment knobs provide smooth and accurate height adjustment. Lab-Lifts accept optional Support Rod Kit which mounts to the upper deck.



| Model | Deck Size | Min. to Max. Height | Max. Load* | Item No |
|---------------|--------------|---------------------|------------|----------|
| CLR-LBLFTA010 | 102 × 102 mm | 64 to 127 mm | 29,94 kg | 30400007 |
| CLR-LBLFTA015 | 152 × 152 mm | 76 to 248 mm | 59,87 kg | 30400008 |
| CLR-LBLFTA020 | 203 × 203 mm | 76 to 248 mm | 79,83 kg | 30400009 |
| CLR-LBLFTA025 | 254 × 254 mm | 89 to 330 mm | 84,37 kg | 30400010 |

*NOTE: Maximum load rating represents static weight only. Static weight is the amount a unit can hold, not lift.

OPTIONAL ACCESSORIES

432 mm Support Rod Kit

Ideal for creating an adjustable support stand for mounting various items such as thermometer clamps, temperature probes, flask and column clamps. This kit allows you to mount a 432 mm threaded vertical support rod to the upper deck of a 152 × 152 mm, 203 × 203 mm, 254 × 254 mm, 305 × 305 mm or 406 × 406 mm Lab-Lift by screwing the rod into the pre-drilled hole.

432 mm Support Rod Kit includes:

- 25 - 432 mm Stainless Steel Rod
- 1 - Jam Nut
- 1 - Flat Washer



| Model | Description | Rod Diameter | Item No |
|-------|------------------------|--------------|----------|
| | 432 mm Support Rod Kit | 13 mm | 30400050 |

Rods, Frames, & Supports

OHAUS Heavy-Duty Lab-Lifts

- Stainless steel construction
- Seven convenient sizes to choose from
- Autoclavable and chemical resistant

These Heavy-Duty, Stainless Steel Lab-Lifts are ultra-stable lifting platforms with exceptional strength and durability. Constructed of stainless steel, Lab-Lifts are designed for use in extreme environments and high load applications. Equipped with oversized, sure-grip adjustment knobs that provide extra leverage for easy height adjustments. Durable construction allows lifts to be autoclaved or chemically cleaned. Ideal for use in fume hoods or bench tops and holds a variety of items such as glassware, hotplates, baths, and magnetic stirrers.



| Model | Deck Size | Min. to Max. Height | Max. Load* | Item No |
|---------------|--------------|---------------------|------------|----------|
| CLR-LBLFTS008 | 76 × 76 mm | 64 to 127 mm | 45,36 kg | 30400000 |
| CLR-LBLFTS010 | 102 × 102 mm | 64 to 127 mm | 45,36 kg | 30400001 |
| CLR-LBLFTS015 | 152 × 152 mm | 76 to 248 mm | 60,33 kg | 30400002 |
| CLR-LBLFTS020 | 203 × 203 mm | 76 to 248 mm | 102,97 kg | 30400003 |
| CLR-LBLFTS025 | 254 × 254 mm | 89 to 330 mm | 112,04 kg | 30400004 |
| CLR-LBLFTS030 | 305 × 305 mm | 102 to 495 mm | 45,36 kg | 30400005 |
| CLR-LBLFTS041 | 406 × 406 mm | 102 to 495 mm | 45,36 kg | 30400006 |

*NOTE: Maximum load rating represents static weight only. Static weight is the amount a unit can hold, not lift.

OPTIONAL ACCESSORIES

432 mm Support Rod Kit

Ideal for creating an adjustable support stand for mounting various items such as thermometer clamps, temperature probes, flask and column clamps. This kit allows you to mount a 432 mm threaded vertical support rod to the upper deck of a 152 × 152 mm, 203 × 203 mm, 254 × 254 mm, 305 × 305 mm or 406 × 406 mm Lab-Lift by screwing the rod into the pre-drilled hole.

432 mm Support Rod Kit includes:

- 25 - 432 mm Stainless Steel Rod
- 1 - Jam Nut
- 1 - Flat Washer

| Model | Description | Rod Diameter | Item No |
|-------|------------------------|--------------|----------|
| | 432 mm Support Rod Kit | 13 mm | 30400050 |



Ratchet Tool

Designed to add extra leverage to your 305 × 305 mm or 406 × 406 mm Lab-Lift. This recommended Ratchet Tool easily attaches to the actuating rod to allow easy, accurate adjustments.

| Model | Description | Item No |
|-------|--------------|----------|
| | Ratchet Tool | 30400049 |



Rods, Frames, & Supports

Cylinder Bench Clamps

Rugged cast aluminium clamps safely secure gas cylinders to benches, tables or other flat surfaces up to 64 mm thick. The 25 mm wide, 1372 mm long nylon strap features a nickel-plated, non-slip spring catch and buckle for easy adjustment around cylinders from 102 to 356 mm in diameter. Models 711 and 716 available with or without a "Secure Cylinder" safety message strap.



safety message strap

Model 711 Bench Clamp

This bench clamp has a large tightening handle for mounting to any flat surface up to 64 mm thick. A nylon pad prevents damage to the bench or table surface. Two tapered mounting screw holes are provided for permanent attachment to bench-top.

| Model | Description | Dimensions L x W x H (closed) | Cylinder Diameter | Item No |
|----------|---|-------------------------------|-------------------|----------|
| CLR-711 | Model 711 Bench Clamp with Strap | 83 x 133 x 165 mm | 102 to 356 mm | 30400020 |
| CLR-711M | Model 711 Bench Clamp with Safety Message Strap | 83 x 133 x 165 mm | 102 to 356 mm | 30400021 |



safety message strap

Model 716 Bench Clamp

This bench clamp is similar to Model 711, but includes a sturdy safety chain for extra security. Chain measures 1245 mm.

| Model | Description | Dimensions L x W x H (closed) | Cylinder Diameter | Item No |
|----------|---|-------------------------------|-------------------|----------|
| CLR-716 | Model 716 Bench Clamp with Strap & Chain | 83 x 133 x 165 mm | 102 to 356 mm | 30400026 |
| CLR-716M | Model 716 Bench Clamp with Safety Message Strap & Chain | 83 x 133 x 165 mm | 102 to 356 mm | 30400027 |

Model 712 Heavy-Duty Bench Clamp

This bench clamp has two screw clamps to tighten for extra firm mounting to any flat surface up to 45 mm thick with a 32 mm overhang. Especially convenient for temporary storage situations. Rugged cast aluminium bench clamp features a 25 mm wide, 1372 mm long nylon strap with nickel-plated, non-slip spring catch buckle to hold cylinders from 102 to 356 mm in diameter. This clamp is not available with a safety message strap.



| Model | Description | Dimensions L x W x H (closed) | Cylinder Diameter | Item No |
|---------|---|-------------------------------|-------------------|----------|
| CLR-712 | Model 712 Heavy-Duty Bench Clamp with Strap | 83 x 152 x 114 mm | 102 to 356 mm | 30400022 |

Rods, Frames, & Supports

Model 715 Wall Bracket

Cylinder wall-mount brackets are constructed of cast aluminium and contoured to allow cylinders to fit firmly along the support edge. Recessed screw holes at each side of the bracket allow for easy wall mounting. Features a 25 mm wide, 1372 mm long nylon strap with nickel-plated, non-slip spring catch and buckle for fast, easy adjustment. Available with or without a "Secure Cylinder" safety message strap. For cylinders from 102 to 356 mm in diameter.



safety message strap

| Model | Description | Dimensions L x W x H | Cylinder Diameter | Item No |
|----------|--|----------------------|-------------------|----------|
| CLR-715 | Model 715 Wall Bracket with Strap | 48 x 206 x 118 mm | 102 to 356 mm | 30400024 |
| CLR-715M | Model 715 Wall Bracket with Safety Message Strap | 48 x 206 x 118 mm | 102 to 356 mm | 30400025 |

Model 717 Wall Bracket

This wall bracket is similar to Model 715, but includes a sturdy safety chain for extra security. Chain measures 1245 mm.



safety message strap

| Model | Description | Dimensions L x W x H | Cylinder Diameter | Item No |
|----------|--|----------------------|-------------------|----------|
| CLR-717 | Model 717 Wall Bracket with Strap & Chain | 48 x 206 x 118 mm | 102 to 356 mm | 30400028 |
| CLR-717M | Model 717 Wall Bracket with Safety Message Strap & Chain | 48 x 206 x 118 mm | 102 to 356 mm | 30400029 |

Rods, Frames, & Supports

Model 701 PVC Coated Stand

The PVC coated stand has a flat bottom support so it can't "ride up" on the cylinder. Includes an adjustable 25 mm wide, 1372 mm long nylon strap with nickel-plated, non-slip spring catch and buckle for fast, easy adjustment to keep the cylinder safely in place against upper support bar. Lower support bar stops cylinder shift. The PVC coating prevents marring of the cylinder surface. This clamp is not available with a safety message strap.



| Model | Description | Dimensions L x W x H | Cylinder Diameter | Item No |
|---------|----------------------------|----------------------|-------------------|----------|
| CLR-701 | Model 701 PVC Coated Stand | 438 x 438 x 273 mm | 178 x 254 mm | 30400017 |

Model 703 Stand

This cast aluminium stand hinges open and has 4 thumbscrews to tightly grip cylinders from 203 to 229 mm in diameter.



| Model | Description | Dimensions (Dia. x H) | Cylinder Diameter | Item No |
|---------|-----------------|-----------------------|-------------------|----------|
| CLR-703 | Model 703 Stand | 464 x 152 mm | 203 x 229 mm | 30400018 |

Model 704 Adjustable Stand

Heavy-duty, cast aluminium stand with adjustable "L" brackets hold cylinders from 152 to 235 mm in diameter. Hinges open for installation without lifting the cylinder or disturbing connections. Prevents accidental tipping. Hinges open for easy, no-lifting installation.



| Model | Description | Dimensions (Dia. x H) | Cylinder Diameter | Item No |
|---------|----------------------------|-----------------------|-------------------|----------|
| CLR-704 | Model 704 Adjustable Stand | 470 x 191 mm | 152 x 235 mm | 30400019 |

Model 713 Portable Stand

This cast iron portable cylinder stand offers a sturdy cylinder stand and a convenient cylinder dolly all-in-one. This cylinder stand is designed in two interlocking halves and can be installed without lifting the tank. Built-in rubber wheels for easy mobility. Three thumbscrews tightly grip cylinder.



| Model | Description | Dimensions (Dia. x H) | Cylinder Diameter | Item No |
|---------|--------------------------|-----------------------|-------------------|----------|
| CLR-713 | Model 713 Portable Stand | 394 x 76 mm | 178 x 235 mm | 30400023 |

Flow Control Clamps

LabJaws flow control devices offer selection and quality. They are finely machined to deliver accurate regulation or interruption of fluid flow. Every flow control device resists corrosion and rust. Hosecocks offer easy one-hand operation. Convex bearing surfaces and rounded edges protect tubing. Pinchcocks are designed to quickly start and stop flow and provide complete closure without damaging tubing. Operated with a simple squeeze. Nickel-plated construction (unless otherwise noted).

Regular Hosecock

Adjustment screw with oversized head for accurate regulation. Built-in side lugs for foot mounting. Tubing retainer screw.

Stainless Steel

| Model | Min. to Max. Grip | Dimensions (W × H - open) | Item No |
|-----------|-------------------|---------------------------|----------|
| CLF-HKRG5 | 0 to 17 mm | 37 × 62 mm | 30392221 |

Nickel-Plated Zinc

| Model | Min. to Max. Grip | Dimensions (W × H - open) | Item No |
|-----------|-------------------|---------------------------|----------|
| CLF-HKRGZ | 0 to 17 mm | 37 × 62 mm | 30392210 |



30392221

Heavy-Duty Hosecock

Large hand wheel for ease of flow adjustment. Unique design offers unparalleled control. Works well with heavy cut nylon braided tubing.

| Model | Min. to Max. Grip | Dimensions (W × H - open) | Item No |
|-----------|-------------------|---------------------------|----------|
| CLF-HKHDZ | 0 to 29 mm | 57 × 106 mm | 30392310 |

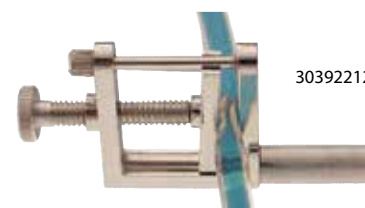


30392310

Hosecock Extension Clamp

Similar to regular hosecock but with 145 mm bottom mounted extension rod for attachment to frames and rods.

| Model | Min. to Max. Grip | Arm Length | Arm Dia. | Overall Length | Item No |
|-----------|-------------------|------------|----------|----------------|----------|
| CLF-HKEXZ | 0 to 17 mm | 145 mm | 8 mm | 175 mm | 30392212 |



30392212

Hosecock Foot

Add this option to Regular Hosecock (30392210 or 30392221) for bench or table mounting. Includes two mounting screws.

| Model | Diameter | Item No |
|---------|----------|----------|
| CLF-FTZ | 27 mm | 30392211 |



30392211

Regular Pinchcock

For routine stop/start flow operation.

| Model | Min. to Max. Grip | Clamp Height | Item No |
|-----------|-------------------|--------------|----------|
| CLF-PKRGZ | 0 to 12 mm | 47 mm | 30392245 |



30392245

Variable Flow Pinchcock

For precise flow adjustment and duplication of flow rates.

| Model | Min. to Max. Grip | Clamp Height | Item No |
|-----------|-------------------|--------------|----------|
| CLF-PKVFZ | 0 to 13 mm | 47 mm | 30392247 |

Heavy-Duty Pinchcock

Equipped with heavy-duty spring for tough jobs. Ensures complete closure.

| Model | Min. to Max. Grip | Clamp Height | Item No |
|-----------|-------------------|--------------|----------|
| CLF-PKHDZ | 0 to 11 mm | 48 mm | 30392246 |



30392246

Misc. Non-Electrical Products

Inoculating Turntables

OHAUS hand-operated inoculating turntables produce almost concentric circles of bacterial colonies that are evenly distributed across petri dishes. Cast iron turntables are coated with gray baked acrylic enamel.

The 76 mm high, small turntable accommodates 100 mm petri dishes. It has a tripod base to bring work approximately to eye level. It has a center disk covered with non-skid rubber lining.

The large turntable accommodates 100 mm or 150 mm petri dishes. It has a height of only 32 mm ideal for steadying a forearm on the work surface while plating. The large turntable contains two circular sections. The top section has a raised gripper lip as well as a recessed center disk covered with non-skid rubber lining.

| Model | Description | Dimensions (Dia. × H) | Item No |
|------------|-----------------|-----------------------|----------|
| CLN-INOTTS | Small Turntable | 114 × 77 mm | 30400046 |
| CLN-INOTTL | Large Turntable | 150 × 32 mm | 30400047 |



30400046



30400047

Slide Staining Rack

Constructed of stainless steel, the OHAUS Slide Staining Rack will resist corrosion under normal use. Adjustable to fit trays or sinks up to 533 mm inside.

| Model | Description | Dimensions (L × W) | Item No |
|-----------|---------------------|--------------------|----------|
| CLN-STNRK | Slide Staining Rack | 603 × 89 mm | 30400048 |



30400048

Airejector

Rapid air removal evacuates 1 liter of air to 711 mm of vacuum in 30 seconds. Works with compressed air sources to 60 psi. Nickel-plated construction.

| Model | Description | Length | Item No |
|-----------|-------------|--------|----------|
| CLN-AIREJ | Airejector | 140 mm | 30392367 |



30392367

Contact

Technical Support Centre

e-mail: tsc@ohaus.com
tel: 0041 22 567 53 19
fax: 0041 22 567 53 21

Sales Support Centre

e-mail: ssc@ohaus.com
tel: 0041 22 567 53 20
fax: 0041 22 567 53 21

OHAUS Europe GmbH
Heuwinkelstrasse 3,
8606 Nänikon,
Switzerland

www.ohaus.com



www.ohaus.com

General Terms and Conditions are available
on our OHAUS Partner Shop or via our Sales Support Team.

© OHAUS Europe GmbH January 2020
Prices and specifications are subject to change without notice.