

Mobius® Power MIX 1000, 2000, 2500 and 3000 Single-Use Mixers

High performance mixing technology and ergonomic design features

The **Mobius® Power MIX 1000, 2000, 2500 and 3000** combine high performance mixing technology with design features that make them easy to use. The impeller design and motor are based on our magnetically coupled NovAseptic® mixing technology, a proven mixing technology in stainless steel tanks. The system efficiently mixes the most challenging buffers, media and biopharmaceutical ingredients.

Features and benefits:

- Powerful magnetically coupled impeller designed to efficiently mix the most challenging buffer, media, and biopharmaceutical ingredients
- Broad working volume, from a minimum volume that is approximately 10% to 20% of the working volume with maximum volume of 10% over (size dependent) the working volume, for processing flexibility
- Doors that open to one half the mixer's diameter and easily accessible off-set drain for easy bag loading
- Optional integrated hoist for powder delivery (2000 L model only)
- Integrated load cells and temperature sensor
- In-process pH and conductivity measurement option
- Closed, sterile, and zero deadleg sampling directly from the mixing bag
- Monitor & control remotely with Ready To Connect control box
- Data collection with 21 CFR Part 11 compliant Chart Recorder option
- Addition of the 500 L extension onto the Mobius® Power MIX 2000 to create the 2500 and 3000 L sizes for added flexibility



Specifications

| Description | 1000 L | 2000 L | Extension |
|--|--------------------------------------|---|--|
| Carrier | | | |
| Materials of construction | | | |
| Tank | 304L stainless steel | 304L stainless steel | 304L stainless steel |
| Stand | 304L stainless steel | 304L stainless steel | N/A |
| Latch | 18-8 stainless steel | 18-8 stainless steel | 18-8 stainless steel |
| Legs | 304L stainless steel | 304L stainless steel | N/A |
| Dimensions L x W | 57 x 54 in. (1440 x 1380 mm) | 64 x 64 in. (1620 x 1620 mm) | 64 x 64 in. (1620 x 1620 mm) |
| Height of one extension ring | N/A | N/A | 13 in. (330 mm) |
| Height without hoist | 78 in. (1980 mm) | 90 in. (2280 mm) | 101 in. (2560 mm) for 2500 L 112 in. (2840 mm) for 3000 L |
| Height with hoist | N/A | 133 in. (3380 mm) | N/A |
| Weight with hoist and lids | N/A | 2101 lb (953 kg) | N/A |
| Weight with lids | 1490 lb (676 kg) | 1975 lb (895 kg) | N/A |
| Weight of extension | N/A | N/A | 196 lb (89 kg) |
| Minimum working volume (to cover the impeller) | 100 L | 200 L | N/A |
| Minimum sampling volume | 200 L | 300 L | N/A |
| Maximum working volume | 1100 L | 2200 L for 2000 L 2600 L for 2500 L 3000 L for 3000 L | N/A |
| Fluid volume in jacket (approx.) | 5.6 gal (21.2 L) | 8 gal (30 L) | N/A |
| Heat transfer area of jacket (approx.) | 36.3 sq. ft (3.4 sq. m) | 57.7 sq. ft (5.4 sq. m) | N/A |
| Maximum working pressure of jacket | 150 psi (10.3 bar) | 150 psi (10.3 bar) | N/A |
| Stainless steel jacketed mixers ASME U-1 code stamped | optional | optional | N/A |
| Mettler-Toledo SWB505 MultiMount™ load cells (qty. 3)* | 0-1200 kg ±1% FS | 0-2400 kg ±1% FS for 2000 L 0-3000 kg ±1% FS for 2500 L 0-3600 kg ±1% FS for 3000 L | N/A |
| Load cell ingress protection rating | IP 68 | IP 68 | N/A |
| RTD temperature sensor JUMO | 0 -60°C ± 1°C | 0 -60°C ± 1°C | N/A |
| pH Sensor Hamilton** | 0-14 pH ±0.1 pH | 0-14 pH ±0.1 pH | N/A |
| Conductivity Sensor Hamilton** | 0.2-200 mS/cm ±10% FS | 0.2-200 mS/cm ±10% FS | N/A |
| Storage temperature | 0-40 °C (non-condensing environment) | 0-40 °C (non-condensing environment) | 0-40 °C (non-condensing environment) |
| Operating temperature | 4-60 °C (non-condensing environment) | 4-60 °C (non-condensing environment) | 4-60 °C (non-condensing environment) |

* Available as an option with 1000 L carrier compatible with the standard control box and included in all other carriers

** Only available as an option with the Ready To Connect control box

Please note: The Mobius® Power MIX 2500 consists of the same base carrier as the Power MIX 2000 + one extension. The Power MIX 3000 consists of the same base carrier as the Power MIX 2000 + two extensions. The hoist is not an option when either one or two extensions are added to the base of the Power MIX 2000 carrier.

The following components are appropriate for the 1000 L, 2000 L, 2500 L, and 3000 L models.

| Motor | |
|---|---|
| Weight | 30 lb (14 kg) |
| Electrical (max) | 550 W |
| Design speed (max) | 380 rpm |
| | <i>Maximum operating speed has to be validated for each process and is dependent on volume, viscosity, etc.</i> |
| Cable length | 12 ft (3.7 m) |
| Ingress protection rating | IP 55 |
| Regulatory information | CSA, CE, UL compliant |
| Standard Control Box | |
| Materials of construction | 304L stainless steel |
| Weight | 21 lb (10 kg) |
| Electrical | 120 V, 60 Hz, 20 A or 230 V, 50 Hz, 10 A |
| Cable length | 16 ft (4.9 m) |
| Ingress protection rating | IP 55 |
| Regulatory information | CE, UL compliant |
| Standard Display Box (with temperature sensor and load cell display) | |
| Materials of construction | 304L stainless steel |
| Weight | Permanently mounted to carrier |
| Electrical | 120/230 Vac, 50/60 Hz, 1 A |
| Cable length | 16 ft (4.9 m) |
| Ingress protection rating | IP 55 |
| Regulatory information | CE, UL compliant |
| Ready To Connect Control Box | |
| Materials of Construction | 304L stainless steel |
| Dimensions L X W | 26 x 22 in. (660 x 560 mm) |
| Height | 52 in. (1320 mm) |
| Weight | 238 lb (108 kg) |
| Electrical | 100-120 V, 50/60 Hz, 12.9 A or 200-240 V, 50/60 Hz, 7.2 A |
| Cable length | 16 ft (4.9 m) |
| Ingress protection rating | IP 55 |
| Regulatory information | CE, CB Scheme |
| Data Recorder Eurotherm | Optional |
| Mixer Container Assembly Materials of Construction | |
| Mix container | PureFlex™ or PureFlex™ Plus Film |
| Adapters | SterilEnz™ LDPE |
| Luer plugs | Kynar® polyvinylidene fluoride |
| Connectivity | CPC® polysulfone |
| Tubing | Silicone |
| Pinch clamp | PVDF |
| Impeller | Neodymium magnets encased in polypropylene |
| Powder port | Polyethylene |
| TC gasket | Silicone |
| TC clamp | Nylon |
| TC end cap | Polypropylene |
| Cup | HDPE |
| Probe port | HDPE |
| O-ring | Silicone |
| Plug | Polypropylene |
| Needle-free sample port | HDPE |
| O-ring | Silicone |
| Conductivity and pH sensor (multi-use) | EPDM and stainless steel 316L |

Ordering Information

Mobius® Power MIX Carriers with standard control box

A complete system is made up of carrier, control box, motor, and 2x power cord

| | Mobius® Power MIX 1000 | Mobius® Power MIX 2000 | Mobius® Power MIX 2500 | Mobius® Power MIX 3000 |
|---|------------------------|------------------------|--------------------------------|-----------------------------------|
| Carrier Only | | | | |
| Stainless steel jacketed, ASME certified with temperature sensor | MXRJ1000TA | | | |
| Stainless steel jacketed, ASME certified with temperature sensor and load cells | MXRJ1000TLA | MXRJ2000TLA | MXRJ2000TLA + MXREXT500 | MXRJ2000TLA + 2x MXREXT500 |
| Stainless steel jacketed with temperature sensor, and load cells | | MXRJ2000TL | MXRJ2000TL + MXREXT500 | MXRJ2000TL + 2x MXREXT500 |
| Stainless steel jacketed with temperature sensor, load cells, and hoist | | MXRJ2000HTL | | |
| Stainless steel jacketed, ASME certified with temperature sensor, load cells, and hoist | | MXRJ2000HTLA | | |
| Accessories | | | | |
| Control box unit, 120 V | | | MXRCTRLB2K | |
| Control box unit, 230 V | | | MXRCTRLB2K2 | |
| Motor | | | MXRMTR2K | |
| Electrical power cords (country specific) | | | | |
| North America, 120 V (15 A) | | | MXRPCNA1K2K | |
| North America, 120 V (20 A) | | | MXRPCNA125 | |
| Europe, 230 V (10 A) | | | MXRPCEU | |
| Argentina, Australia, Colombia, New Zealand, Paraguay, Uruguay | | | MXRPCAACNPU | |
| Denmark | | | MXRPCDN | |
| Israel | | | MXRPCIS | |
| Chile, Ethiopia, Italy, 250 V (10 A) | | | MXRPCCEI | |
| Bangladesh, Burma, Pakistan, South Africa, Sri Lanka | | | MXRPCBBPSS | |
| Switzerland | | | MXRPCSZ | |
| UK, Ireland | | | MXRPCUK | |

Display box with temperature sensor and load cell displays is standard and provided with the carrier.

Please note: With the exception of NA, two identical power cords must be purchased — one power cord for the removable control box and one power cord for the display box.

In NA, the two power cords that need to be purchased are MXRPCNA1K2K and MXRPCNA125.

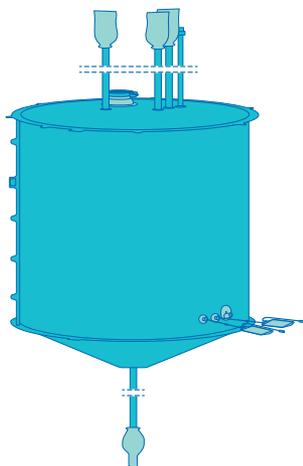
Spare Parts

Please refer to spare part list MS_CA7420EN available on EMDMillipore.com

Single-Use assemblies to fit Mobius® Power MIX Carriers with standard control box

| Volume | Film | Part Code | Closed Top Bag | Liner | Certification | Qty / Pk | Top Ports | | | Bottom Port | Side Ports | |
|--------|----------------|--------------|----------------|-------|---------------|----------|--|---|---------------------------------------|--|-------------------|---------------------------------------|
| | | | | | | | 3/4" ID Silicone tubing - 66" + Female Colder MPU + Plug | 3/4" ID Silicone tubing - 118" + Female Colder MPU + Plug | 1" ID Silicone tubing - 66" + 1,5" TC | 1" ID Silicone tubing - 118" + 1,5" TC | 4" TC Powder port | 1" ID Silicone tubing - 66" + 1,5" TC |
| 1000 L | PureFlex™ | MXRA1000G1 | ✓ | | Gold | 1 | 1 | 3 | 1 | 1 | 2 | 1 |
| | | MXRA1000B1 | ✓ | | Bronze | 1 | 1 | 3 | 1 | 1 | 2 | 1 |
| | | MXRL1000B1 | | ✓ | Bronze | 1 | | | | 1 | 2 | 1 |
| | PureFlex™ Plus | MXRA1000GPL1 | ✓ | | Gold | 1 | 1 | 3 | 1 | 1 | 2 | 1 |
| | | MXRA1000BPL1 | ✓ | | Bronze | 1 | 1 | 3 | 1 | 1 | 2 | 1 |
| 2000 L | PureFlex™ Plus | MXRL1000BPL1 | | ✓ | Bronze | 1 | | | | 1 | 2 | 1 |
| | | MXRA2000GPL1 | ✓ | | Gold | 1 | 1 | 3 | 1 | 1 | 2 | 1 |
| | | MXRA2000BPL1 | ✓ | | Bronze | 1 | 1 | 3 | 1 | 1 | 2 | 1 |
| | | MXRL2000BPL1 | | ✓ | Bronze | 1 | | | | 1 | 2 | 1 |

| Volume | Film | Part Code | Closed Top Bag | Liner | Certification | Qty / Pk | Top Ports | | | Bottom Port | Side Ports | |
|--------|----------------|--------------|----------------|-------|---------------|----------|--|--|---------------------------------------|---------------------------------------|-------------------|--|
| | | | | | | | 3/4" ID Silicone tubing - 63" + Female Colder MPU + Plug | 3/4" ID Silicone tubing - 84" + Female Colder MPU + Plug | 1" ID Silicone tubing - 63" + 1,5" TC | 1" ID Silicone tubing - 84" + 1,5" TC | 4" TC Powder port | 1" ID Silicone tubing - 120" + 1,5" TC |
| 2500 L | PureFlex™ Plus | MXRA2500GPL1 | ✓ | | Gold | 1 | 1 | 3 | 1 | 1 | 2 | 1 |
| | | MXRA2500BPL1 | ✓ | | Bronze | 1 | 1 | 3 | 1 | 1 | 2 | 1 |
| 3000 L | PureFlex™ Plus | MXRA3000GPL1 | ✓ | | Gold | 1 | 1 | 3 | 1 | 1 | 2 | 1 |
| | | MXRA3000BPL1 | ✓ | | Bronze | 1 | 1 | 3 | 1 | 1 | 2 | 1 |



Example of 1000 L single-use assembly.

Ordering Information

Mobius® Power MIX Carriers with Ready To Connect control box

A complete system is made up of carrier, control box, motor and power cord

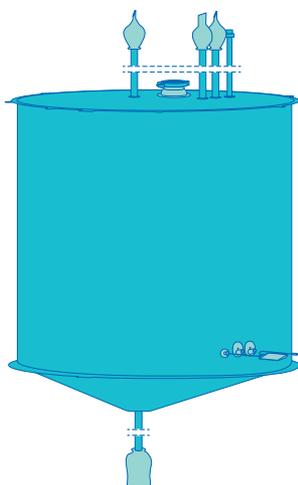
| | Mobius® Power MIX 1000 | Mobius® Power MIX 2000 | Mobius® Power MIX 2500 | Mobius® Power MIX 3000 |
|---|------------------------|------------------------|--------------------------|-----------------------------|
| Carrier Only | | | | |
| Stainless steel jacketed with temperature sensor and load cells | SMXRJ1000TL | SMXRJ2000TL | SMXRJ2000TL + MXREXT500 | SMXRJ2000TL + 2x MXREXT500 |
| Stainless steel jacketed, ASME certified with temperature sensor and load cells | SMXRJ1000TLA | SMXRJ2000TLA | SMXRJ2000TLA + MXREXT500 | SMXRJ2000TLA + 2x MXREXT500 |
| Stainless steel jacketed with temperature sensor, load cells, and hoist | | SMXRJ2000HTL | | |
| Stainless steel jacketed, ASME certified with temperature sensor, load cells, and hoist | | SMXRJ2000HTLA | | |
| Accessories | | | | |
| Control Box Unit, 115 V (1 PH)- 60 Hz | | | SMCBPMC2V1 | |
| Control Box Unit, 115 V (1 PH)- 60 Hz-Sensor Pack (pH & Conductivity) | | | SMCBPMC2V1S | |
| Control Box Unit, 115 V (1 PH)- 60 Hz-Data Recorder | | | SMCBPMC2V1R | |
| Control Box Unit, 115 V (1 PH)- 60 Hz-Sensor Pack (pH & Conductivity) - Data Recorder | | | SMCBPMC2V1SR | |
| Control Box Unit, 230 V (1 PH)- 60 Hz | | | SMCBPMC2V3 | |
| Control Box Unit, 230 V (1 PH)- 60 Hz-Sensor Pack (pH & Conductivity) | | | SMCBPMC2V3S | |
| Control Box Unit, 230 V (1 PH)- 60 Hz-Data Recorder | | | SMCBPMC2V3R | |
| Control Box Unit, 230 V (1 PH)- 60 Hz-Sensor Pack (pH & Conductivity) - Data Recorder | | | SMCBPMC2V3SR | |
| Motor | | | MXRMTR2K | |
| Power Cords (Country specific) | | | | |
| North America, NEMA 5-15P, IEC Plug Type B | | | SMPCNA | |
| Europe, CEE 7/7, IEC Plug Type F | | | SMPCEU | |
| Australia, New Zealand, AS/NZS 3112, IEC Plug Type I | | | SMPCANZ | |
| India, IS1293, IEC Plug Type M | | | SMP CIN | |
| Switzerland, SEV-1011 Type 12, IEC Plug Type J | | | SMP CSZ | |
| United Kingdom, BS 1363/A, IEC Plug Type G | | | SMP CUK | |
| Japan, JIS 8303, IEC Plug Type B | | | SMP CJP | |
| China, GB2099, IEC Plug Type I | | | SMP CCH | |
| Single Phase Flying Leads (without plug) | | | SMP C1FL | |

Spare Parts

Please refer to spare part list MS_CA7420EN available on EMDMillipore.com

Single-Use assemblies to fit Mobius® Power MIX Carriers with Ready To Connect control box

| Volume | Film | Part Code | Closed Top Bag | Liner | Certification | Qty / Pk | Top Ports | | | Bottom Port | Side Ports | | |
|--------|----------------|-----------------|----------------|-------|---------------|----------|--|---|---------------------------------------|--|-------------------|---------------------------------------|--|
| | | | | | | | 3/4" ID Silicone tubing - 66" + Female Colder MPU + Plug | 3/4" ID Silicone tubing - 120" + Female Colder MPU + Plug | 1" ID Silicone tubing - 66" + 1,5" TC | 1" ID Silicone tubing - 120" + 1,5" TC | 4" TC Powder port | 1" ID Silicone tubing - 66" + 1,5" TC | 1" ID Silicone tubing - 120" + 1,5" TC |
| 1000 L | PureFlex™ | SMXRA1000LG1M | ✓ | | Gold | 1 | 1 | | 3 | 1 | 1 | 1 | 2 |
| | | SMXRA1000LS1M | ✓ | | Silver | 1 | 1 | | 3 | 1 | 1 | 1 | 2 |
| | | SMXRA1000LB1M | ✓ | | Bronze | 1 | 1 | | 3 | 1 | 1 | 1 | 2 |
| | | SMXRL1000LB1M | | ✓ | Bronze | 1 | | | | | 1 | 1 | 2 |
| | PureFlex™ Plus | SMXRA1000LGPL1M | ✓ | | Gold | 1 | 1 | | 3 | 1 | 1 | 1 | 2 |
| | | SMXRA1000LSPL1M | ✓ | | Silver | 1 | 1 | | 3 | 1 | 1 | 1 | 2 |
| | | SMXRA1000LBPL1M | ✓ | | Bronze | 1 | 1 | | 3 | 1 | 1 | 1 | 2 |
| | | SMXRL1000LBPL1M | | ✓ | Bronze | 1 | | | | | | 1 | 1 |
| 2000 L | PureFlex™ | SMXRA2000LG1M | ✓ | | Gold | 1 | | 1 | | 3 | 1 | 1 | 2 |
| | | SMXRA2000LS1M | ✓ | | Silver | 1 | | 1 | | 3 | 1 | 1 | 2 |
| | | SMXRA2000LB1M | ✓ | | Bronze | 1 | | 1 | | 3 | 1 | 1 | 2 |
| | | SMXRL2000LB1M | | ✓ | Bronze | 1 | | | | | | 1 | 1 |
| | PureFlex™ Plus | SMXRA2000LGPL1M | ✓ | | Gold | 1 | | 1 | | 3 | 1 | 1 | 2 |
| | | SMXRA2000LSPL1M | ✓ | | Silver | 1 | | 1 | | 3 | 1 | 1 | 2 |
| | | SMXRA2000LBPL1M | ✓ | | Bronze | 1 | | 1 | | 3 | 1 | 1 | 2 |
| | | SMXRL2000LBPL1M | | ✓ | Bronze | 1 | | | | | | 1 | 1 |
| 2500 L | PureFlex™ Plus | SMXRA2500LGPL1M | ✓ | | Gold | 1 | | 1 | | 3 | 1 | 1 | 2 |
| | | SMXRA2500LSPL1M | ✓ | | Silver | 1 | | 1 | | 3 | 1 | 1 | 2 |
| | | SMXRA2500LBPL1M | ✓ | | Bronze | 1 | | 1 | | 3 | 1 | 1 | 2 |
| | | SMXRL2500LBPL1M | | ✓ | Bronze | 1 | | | | | | 1 | 1 |
| 3000 L | PureFlex™ Plus | SMXRA3000LGPL1M | ✓ | | Gold | 1 | | 1 | | 3 | 1 | 1 | 2 |
| | | SMXRA3000LSPL1M | ✓ | | Silver | 1 | | 1 | | 3 | 1 | 1 | 2 |
| | | SMXRA3000LBPL1M | ✓ | | Bronze | 1 | | 1 | | 3 | 1 | 1 | 2 |
| | | SMXRL3000LBPL1M | | ✓ | Bronze | 1 | | | | | | 1 | 1 |



Example of 2000 L single-use assembly

For additional information,
please visit www.emdmillipore.com

To place an order or receive technical assistance,
please visit www.emdmillipore.com/contactPS

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