

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.

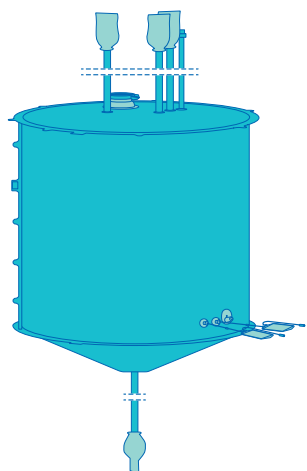
Spare Parts

Please refer to spare part list MK_CA7420EN available on MerkMillipore.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	1" ID Silicone tubing - 118" + 1,5" TC	Needle Free Sample Port + NovaSeptum® NS711-10250 - 250 mL BAG	Probe port
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
MXRL1000BPL1			✓	Bronze	1						1		2	1	
2000 L		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	Needle Free Sample Port + NovaSeptum® NS711-10250 - 250 mL BAG	Probe port	
2500 L	PureFlex™ Plus	MXRA2500GPL1	✓		Gold	1	1		3		1	1	2	1	
		MXRA2500BPL1	✓		Bronze	1	1		3		1	1	2	1	
3000 L		MXRA3000GPL1	✓		Gold	1		1		3		1		2	1
		MXRA3000BPL1	✓		Bronze	1		1		3		1		2	1



Example of 1000 L single-use assembly.

Ordering Information

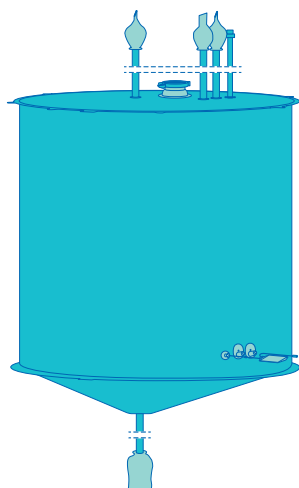
Mobius® Power MIX Carriers with Ready To Connect control box

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		SMPCIN		
Switzerland, SEV-1011 Type 12, IEC Plug Type J		SMPCSZ		
United Kingdom, BS 1363/A, IEC Plug Type G		SMPCUK		
Japan, JIS 8303, IEC Plug Type B		SMPCJP		
China, GB2099, IEC Plug Type I		SMPCCH		
Single Phase Flying Leads (without plug)		SMPC1FL		
Spare Parts				
Please refer to spare part list MK_CA7420EN available on MerkMillipore.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	Needle Free Sample Port + NovaSeptum® NS711-10250 - 250 mL BAG	Probe port
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	2
2000 L	PureFlex™	SMXRA2000LG1M	✓		Gold	1		1		3	1		1	1	2
		SMXRA2000LS1M	✓		Silver	1		1		3	1		1	1	2
		SMXRA2000LB1M	✓		Bronze	1		1		3	1		1	1	2
		SMXRL2000LB1M		✓	Bronze	1							1	1	2
	PureFlex™ Plus	SMXRA2000LGPL1M	✓		Gold	1		1		3	1		1	1	2
		SMXRA2000LSPL1M	✓		Silver	1		1		3	1		1	1	2
		SMXRA2000LBPL1M	✓		Bronze	1		1		3	1		1	1	2
		SMXRL2000LBPL1M		✓	Bronze	1							1	1	2
2500 L	PureFlex™ Plus	SMXRA2500LGPL1M	✓		Gold	1		1		3	1		1	1	2
		SMXRA2500LSPL1M	✓		Silver	1		1		3	1		1	1	2
		SMXRA2500LBPL1M	✓		Bronze	1		1		3	1		1	1	2
		SMXRL2500LBPL1M		✓	Bronze	1							1	1	2
3000 L	PureFlex™ Plus	SMXRA3000LGPL1M	✓		Gold	1		1		3	1		1	1	2
		SMXRA3000LSPL1M	✓		Silver	1		1		3	1		1	1	2
		SMXRA3000LBPL1M	✓		Bronze	1		1		3	1		1	1	2
		SMXRL3000LBPL1M		✓	Bronze	1							1	1	2



Example of 2000 L single-use assembly

For additional information,
please visit www.merckmillipore.com

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

Merck KGaA
Frankfurter Strasse 250
64293 Darmstadt, Germany

