

# Mobius® Power MIX 100, 200 and 500 Single-Use Mixers

## High performance mixing technology and ergonomic design features

The **Mobius® Power MIX 100, 200 and 500** combine high performance mixing technology with easy-to-use design features. The impeller design and motor feature our proven magnetically coupled NovAseptic® mixing technology to efficiently mix 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
- Available in both plastic and jacketed stainless steel for flexibility in biomanufacturing
- Broad working volume, from a minimum volume that is approximately 20% of the working volume (size dependent) with maximum volume of 10% over the working volume, for processing flexibility
- Doors that open to one half the mixer's diameter for easy bag loading
- Stainless steel versions include 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



## Specifications

Description	100 L	200 L	500 L
<b>Carrier – Plastic</b>			
Materials of construction			
Tank	MDPE	MDPE	MDPE
Stand	HDPE	HDPE	HDPE
Latch	300 series stainless steel	300 series stainless steel	300 series stainless steel
Casters	304 SS with polyurethane wheel	304 SS with polyurethane wheel	304 SS with polyurethane wheel
Dimensions L X W	36 x 31 in. (900 x 800 mm)	37 x 31 in. (940 x 800 mm)	43 x 43 in. (1100 x 1080 mm)
Height	49 in. (1240 mm)	50 in. (1270 mm)	66 in. (1670 mm)
Weight	88 lb (40 kg)	97 lb (44 kg)	156 lb (71 kg)
Minimum working volume (to cover the impeller)	10 L	20 L	50 L
Minimum sampling volume	20 L	45 L	100 L
Maximum working volume	110 L	220 L	550 L
Storage temperature	0–40 °C (non-condensing environment)	0–40 °C (non-condensing environment)	0–40 °C (non-condensing environment)
Operating temperature	4–40 °C (non-condensing environment)	4–40 °C (non-condensing environment)	4–40 °C (non-condensing environment)
<b>Carrier – Stainless Steel</b>			
Materials of construction			
Tank	304L stainless steel	304L stainless steel	304L stainless steel
Stand	304L stainless steel	304L stainless steel	304L stainless steel
Latch	18-8 stainless steel	18-8 stainless steel	18-8 stainless steel
Casters	304 SS with hi-temp Phenolic wheel	304 SS with hi-temp Phenolic wheel	304 SS with hi-temp Phenolic wheel
Dimensions L X W	41 x 32 in. (1030 x 810 mm)	45 x 37 in. (1140 x 940 mm)	55 x 47 in. (1390 x 1190 mm)
Height	52 in. (1310 mm)	53 in. (1340 mm)	62 in. (1560 mm)
Weight	550 lb (250 kg)	720 lb (327 kg)	920 lb (417 kg)
Minimum working volume (to cover the impeller)	10 L	20 L	50 L
Minimum sampling volume	20 L	40 L	100 L
Maximum working volume	110 L	220 L	550 L
Fluid volume in jacket (approx.)	1.2 gal (4.5 L)	1.9 gal (7.2 L)	3.5 gal (13.2 L)
Heat transfer area of jacket (approx.)	7.6 sq. ft (.71 sq. m)	12.1 sq. ft (1.1 sq. m)	22.7 sq.ft (2.1 sq. m)
Maximum operating pressure of jacket	90 psi (6.2 bar)	90 psi (6.2 bar)	90 psi (6.2 bar)
Stainless Steel Jacketed Mixers ASME U-1 code stamped	Optional	Optional	Optional
Mettler-Toledo SWB505 MultiMount™ Load Cells (qty 3)* Load Cell Ingress protection rating	0–120 kg ±1% FS IP 68	0–240 kg ±1% FS IP 68	0–600 kg ±1% FS IP 68
RTD Temperature Sensor JUMO	0–60 °C ± 1°C	0–60 °C ± 1°C	0–60 °C ± 1°C
pH Sensor Hamilton**	0–14 pH ±0.1 pH	0–14 pH ±0.1 pH	0–14 pH ±0.1 pH
Conductivity Sensor Hamilton**	0.2–200 mS/cm ±10% FS	0.2–200 mS/cm ±10% FS	0.2–200 mS/cm ±10% FS
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)

\* Included with carriers compatible with Ready To Connect control box

Available as an option with the carriers compatible with standard control box

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

The following components are appropriate for the 100 L, 200 L, and 500 L models, both in stainless steel and plastic formats

#### Motor

Weight lb (kg)	25 lb (12 kg)
Electrical (max)	250 W
Design speed (max)*	375 rpm
Cable length	6 ft. (1.8 m)
Ingress protection rating	IP 55
Regulatory information	CSA, CE, UL compliant

#### Standard Control Box

Materials of construction	304L stainless steel
Weight lb (kg)	21 lbs (10 kg)
Electrical	120 V, 60 Hz, 10 A or 230 V, 50Hz, 3.5 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, 50/60Hz, 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, 50/60Hz, 12.9 A or 200-240 V, 50/60Hz, 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

\*Maximum operating speed has to be validated for each process and is dependent on volume, viscosity, etc.

## Ordering Information

### Mobius® Power MIX Carriers with standard control box

A complete system is made up of carrier, control box, motor and power cord (2x power cords for stainless steel carriers)

	Power MIX 100	Power MIX 200	Power MIX 500
<b>Carrier Only</b>			
HDPE	MXR100HDPE	MXR200HDPE	MXR500HDPE
Stainless steel jacketed, ASME certified with temperature sensor	MXRJ100TA	MXRJ200TA	MXRJ500TA
Stainless steel jacketed, ASME certified with temperature sensor and load cells	MXRJ100TLA	MXRJ200TLA	MXRJ500TLA
<b>Accessories</b>			
Control box unit, 120V	MXRCTRLB1		
Control box unit, 230V	MXRCTRLB2		
Motor	MXRMTR1		
Power Cords (Country specific)			
China, 250 V (16 A)	MXRPCCHINA		
North America, 12 5V (10 A)	MXRPCNA125		
Europe, 250 V (10 A)	MXRPCEU		
Argentina, Australia, Colombia, New Zealand, Paraguay, Uruguay	MXRPCAACNPU		
Denmark	MXRPCDN		
Israel	MXRPCIS		
Chile, Ethiopia, Italy, 250 V (10 A)	MXRPCEI		
Bangladesh, Burma, Pakistan, South Africa, Sri Lanka	MXRPCBBPSS		
Switzerland	MXRPCSZ		
UK, Ireland	MXRPCUK		

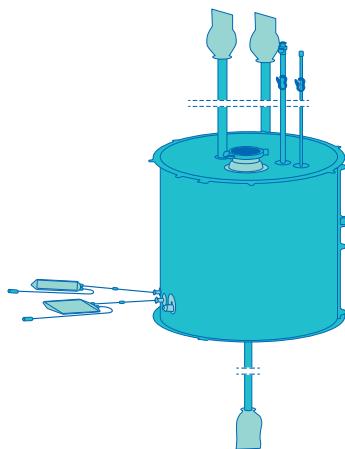
For the Stainless Steel Carriers, two identical power cords must be purchased – one power cord for the removable Control Box and one power cord for the Display Box (with temperature sensor and load cell displays) that is mounted to the base of the unit.

### Spare Parts

Please refer to spare parts list MK\_CA7420EN (available on [MerckMillipore.com](http://MerckMillipore.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		
							1/4" ID Silicone tubing - 36"	+ 1/4" Female Luer + Plug	1/2" ID Silicone tubing - 36" + Female Colder MPX + Plug	3/4" ID Silicone tubing - 36" + 1,5" TC	1" ID Silicone tubing - 36" + 1,5" TC			
100 L	PureFlex™	MXRA0100G4	√	Gold	4	1	1	1	1	1	1	2	1	
		MXRA0100B4	√	Bronze	4	1	1	1	1	1	1	2	1	
	PureFlex™ Plus	MXRL0100B4	√	Bronze	4					1		2	1	
		MXRA0100GPL4	√	Gold	4	1	1	1	1	1	1	2	1	
200 L	PureFlex™	MXRA0100BPL4	√	Bronze	4	1	1	1	1	1	1	2	1	
		MXRL0100BPL4	√	Bronze	4					1		2	1	
	PureFlex™ Plus	MXRA0200G4	√	Gold	4	1	1	1	1	1	1	2	1	
		MXRA0200B4	√	Bronze	4	1	1	1	1	1	1	2	1	
500 L	PureFlex™	MXRL0200B4	√	Bronze	4					1		2	1	
		MXRA0200GPL4	√	Gold	4	1	1	1	1	1	1	2	1	
	PureFlex™ Plus	MXRA0200BPL4	√	Bronze	4	1	1	1	1	1	1	2	1	
		MXRL0200BPL4	√	Bronze	4					1		2	1	
	PureFlex™	MXRA0500G2	√	Gold	2		1		1	2	1	1	2	1
		MXRA0500B2	√	Bronze	2		1		1	2	1	1	2	1
	PureFlex™ Plus	MXRL0500B2	√	Bronze	2							1	2	1
		MXRA0500GPL2	√	Gold	2		1		1	2	1	1	2	1
	PureFlex™ Plus	MXRA0500BPL2	√	Bronze	2		1		1	2	1	1	2	1
		MXRL0500BPL2	√	Bronze	2							1	2	1



Example of 200 L single-use assembly

## Ordering Information

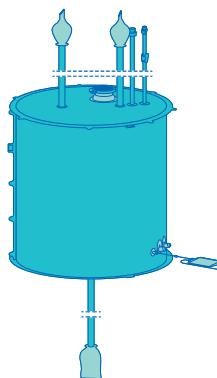
### Mobius® Power MIX Carriers with Ready To Connect control box

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

	Power MIX 100	Power MIX 200	Power MIX 500
<b>Carrier Only</b>			
Stainless steel jacketed with temperature sensor and load cells	<b>SMXRJ100TL</b>	<b>SMXRJ200TL</b>	<b>SMXRJ500TL</b>
Stainless steel jacketed, ASME certified with temperature sensor and load cells	<b>SMXRJ100TLA</b>	<b>SMXRJ200TLA</b>	<b>SMXRJ500TLA</b>
<b>Accessories</b>			
Control Box Unit, 115 V (1Ph)-60Hz	<b>SMCBPMC1V1</b>		
Control Box Unit, 115 V (1Ph)-60Hz-Sensor Pack (pH & Conductivity)	<b>SMCBPMC1V1S</b>		
Control Box Unit, 115 V (1Ph)-60Hz-Data Recorder	<b>SMCBPMC1V1R</b>		
Control Box Unit, 115 V (1Ph)-60Hz-Sensor Pack (pH & Conductivity) -Data Recorder	<b>SMCBPMC1V1SR</b>		
Control Box Unit, 230 V (1Ph)-60Hz	<b>SMCBPMC1V3</b>		
Control Box Unit, 230 V (1Ph)-60Hz-Sensor Pack (pH & Conductivity)	<b>SMCBPMC1V3S</b>		
Control Box Unit, 230 V (1Ph)-60Hz-Data Recorder	<b>SMCBPMC1V3R</b>		
Control Box Unit, 230 V (1Ph)-60Hz-Sensor Pack (pH & Conductivity) -Data Recorder	<b>SMCBPMC1V3SR</b>		
Motor	<b>MXRMTR1</b>		
Power Cords (Country specific)			
North America, NEMA 5-15P, IEC Plug Type B	<b>SMPCNA</b>		
Europe, CEE 7/7, IEC Plug Type F	<b>SMPCEU</b>		
Australia, New Zealand, AS/NZS 3112, IEC Plug Type I	<b>SMPCANZ</b>		
India, IS1293, IEC Plug Type M	<b>SMPCIN</b>		
Switzerland, SEV-1011 Type 12, IEC Plug Type J	<b>SMPCSZ</b>		
United Kingdom, BS 1363/A, IEC Plug Type G	<b>SMPCUK</b>		
Japan, JIS 8303, IEC Plug Type B	<b>SMPCJP</b>		
China, GB2099, IEC Plug Type I	<b>SMPCCH</b>		
Single Phase Flying Leads (without plug)	<b>SMPC1FL</b>		
<b>Spare Parts</b>			
Please refer to spare parts list MK_CA7420EN (available on <a href="http://MerckMillipore.com">MerckMillipore.com</a> )			

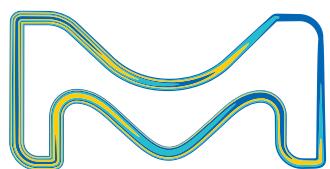
## Single-Use assemblies to fit Mobius® Power MIX Carriers with Ready To Connect control box

Volume	Film	Part Code	Closed Top Bag	Liner	Certification	Qty / Pk	Top Ports			Bottom Port	Side Ports
							"1/4" ID Silicone tubing - 36" + 1/4" Female Luer + Plug"	"1/2" ID Silicone tubing - 36" + Female Colder MPX + Plug	"3/4" ID Silicone tubing - 36" + 1,5" Sterilize™ TC		
100 L	PureFlex™	SMXRA0100LG4M	√	Gold	4	1	1	1	1	1	1
		SMXRA0100LS4M	√	Silver	4	1	1	1	1	1	1
		SMXRA0100LB4M	√	Bronze	4	1	1	1	1	1	1
		SMXRL0100LB4M	√	Bronze	4					1	1
200 L	PureFlex™ Plus	SMXRA0100LGPL4M	√	Gold	4	1	1	1	1	1	1
		SMXRA0100LSPL4M	√	Silver	4	1	1	1	1	1	1
		SMXRA0100LBPL4M	√	Bronze	4	1	1	1	1	1	1
		SMXRL0100LBPL4M	√	Bronze	4					1	1
500 L	PureFlex™ Plus	SMXRA0200LG4M	√	Gold	4	1	1	1	1	1	1
		SMXRA0200LS4M	√	Silver	4	1	1	1	1	1	1
		SMXRA0200LB4M	√	Bronze	4	1	1	1	1	1	1
		SMXRL0200LB4M	√	Bronze	4					1	1
500 L	PureFlex™ Plus	SMXRA0200LGPL4M	√	Gold	4	1	1	1	1	1	1
		SMXRA0200LSPL4M	√	Silver	4	1	1	1	1	1	1
		SMXRA0200LBPL4M	√	Bronze	4	1	1	1	1	1	1
		SMXRL0200LBPL4M	√	Bronze	4					1	1
500 L	PureFlex™ Plus	SMXRA0500LG2M	√	Gold	2		1	1	2	1	1
		SMXRA0500LS2M	√	Silver	2		1	1	2	1	1
		SMXRA0500LB2M	√	Bronze	2		1	1	2	1	1
		SMXRL0500LB2M	√	Bronze	2					1	1
500 L	PureFlex™ Plus	SMXRA0500LGPL2M	√	Gold	2		1	1	2	1	1
		SMXRA0500LSPL2M	√	Silver	2		1	1	2	1	1
		SMXRA0500LBPL2M	√	Bronze	2		1	1	2	1	1
		SMXRL0500LBPL2M	√	Bronze	2					1	1



Example of 500 L single-use assembly

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