Millipore®

Expert Pharm/BioPharm
Products & CTDMO Services

Mobius® MIX Single-Use Mixing Solution

Integrated Mixing and Filtration Technology Delivers Economic and Processing Flexibility

The Mobius® MIX single-use mixing solution delivers advanced technology for mixing pharmaceutical ingredients from intermediate to final drug products and for the preparation of process solutions, such as buffers and media.

This single-use integrated mixing solution offers economic and operational efficiency, saving valuable processing and validation time.

You can also configure the appropriate filter, connector, and tubing for your specific application and environment, including sterile interfaces, from fermentation to final fill. Our proven, scalable, ready-to-use systems and processing technologies reduce the risk of contamination, improve economic and processing flexibility and deliver reproducible results.

Features and Benefits

- Magnetically-driven levitating impeller for improved mixing consistency and efficiency
- Range of sizes available from 10 L to 1000 L
- 100, 200 and 500 L models are available in plastic or stainless steel
- Compact footprint and mobile carrier construction for enhanced flexibility
- Fast, easy set up and use – instant-on electronics – no warm up needed
- Integrated load cells and temperature sensor
- In-process pH and conductivity measurement with mixing
- Closed, sterile, and zero deadleg sampling directly from the mixing bag

The Life Science business of Merck operates as MilliporeSigma in the U.S. and Canada.

Merck

Ready To Connect and Smart Control Boxes

With the ready to connect control box the Mobius® MIX can be monitored and controlled locally or remotely. Plug the ready to connect control box into the network and use Ethernet IP communication protocol to monitor speed, weight, temperature, pH and conductivity remotely.

The smart control box is provided with Bio4C ACE™ application control software that allows real-time monitoring and control of all process parameters, ensuring reproducibility of your mixing process. Bio4C ACE™ software includes a Piping and Instrumentation Diagram (P&ID) optimized for precise control of the Mobius® MIX system with easy access to system status, alarms, and process values. Bio4C ACE™ software is built on a scalable architecture that allows for smooth integration into your network and IT infrastructure.

Both ready to connect and smart control boxes are separate boxes on a four wheels chassis that can be easily moved around the Mobius® MIX carrier. Optimize your layout and get a better access to control your Mobius® mixing system by freely positioning the control box around it.

Bio4C ACE™ Software

Bio4C ACE™ software is a control, data acquisition, and monitoring software. It is designed to be intuitive and secure and allows users to run unit operations in manual and automated modes.

Enhanced Process Automation and Monitoring

Recipe-driven automation eliminates manual operations, increases reproducibility, and minimizes risk of errors. Reports can be easily generated from scratch or from pre-defined templates. An interactive P&ID allows users to visually monitor the process and control each of the components from the Human-Machine Interface (HMI) or from anywhere through a browser-based interface.

Figure 1.

Smart control box.

Secure Software Designed to Facilitate Compliance

Bio4C ACE™ software is designed to meet the regulatory requirements needed to operate in a GMP environment. The software has been developed according to GAMP® 5 guidelines for automation software and facilitates 21 CFR Part 11 and EudraLex Volume 4 Annex 11 compliance for electronic records and signatures, including time-stamped audit trails for verification.

Safe, Sterile Sampling Directly from the Mobius® Mixing Containers

Every Mobius® MIX container includes needle-free sampling valves. The unique design of the sample device eliminates dead legs ensuring a representative sample while avoiding loss of valuable product. Using NovaSeptum® SURe single-use sterile sampling assemblies, a closed concept allows users to obtain a sample directly from the mixing container without the risk of cross contamination. Once a sample is obtained, the sample container is separated from the mixing container using the NovaSeal™ crimping tool that crimps the collar on the sample tube resulting in two closed, sterile ends. The NovaSeptum® SURe assemblies come as single or manifold designs in popular formats. They can also be customized to better fit sampling requirements.

In-process pH and Conductivity Measurement Options

The probe ports enable easy insertion of your standard PG 13.5 threaded reusable probes for inline pH and conductivity measurement. To avoid any risk of contamination single-use pH and conductivity probes can also be delivered preassembled on the Mobius® single-use mixer bag.

Figure 2.

Sample port, single-use conductivity & pH probes.

Ultimus® Film for superior strength and leak resistance

Ultimus® Film meets the needs of the most challenging high-value, single-use applications and is available in our Mobius® MIX Single-Use assemblies.

The ultra-low-density polyethylene (ULDPE) fluid contact layer does not contain Irgafos® 168 to support healthy cell growth. The gas barrier layer is made of ethylene vinyl alcohol copolymer (EVOH). The low-density polyethylene (LDPE) outer layer increases the film's resistance to leak formation. The strength layer, strategically placed between layers of ethylene vinyl acetate (EVA) to ensure flexibility, is comprised of a woven nylon structure that significantly increases the overall durability of the film.

For additional information, please refer to Ultimus® Film Specification Sheet (**SS5660EN**) available at **SigmaAldrich.com**

PureFlex™ Film is also available in our Mobius® MIX Single-Use assemblies, please refer to Specification Sheet (**SP1005EN00**) available at **SigmaAldrich.com**

Certification Levels

Mobius® assemblies are available in several levels of certification. Certification of an assembly is based on the qualification of the components in the assembly, the level of leak testing performed during manufacturing, and the testing performed on the assembly lot after manufacturing. The certification level also impacts the shelf life and sterility claims that are made for the assembly. The standard Mobius® MIX assemblies are available in either gold, silver or bronze certification levels (**see table below**).

Certification Level	Shelf Life	Sterility	USP <85> Endotoxins, USP <788> Sub-visible Particulates	Leak Testing	Component material meet the criteria for Biological Reactivity Testing. These tests can be any or a combination of the following test methods: USP <88> Class VI (*in vivo*), USP <87> (*in vitro*), ISO 10993-5 (*in vitro*)
Gold	2 years	Sterilized using a validated irradiation level of 25–40 kGy	1 assembly per lot tested, post-irradiation	100% assembly leak tested	Post-irradiation
Silver	2 years	Sterilized using a validated irradiation level of 25–40 kGy	Quarterly review of results, post-irradiation	In-process testing	Post-irradiation
Bronze	No claim	Exposed to irradiation level of 25–40 kGy	No testing performed	No testing performed	Pre- irradiation

Services

The pharmaceutical and biotechnology industries are highly regulated and, to help you navigate this challenging environment, we offer a wide range of services. These services help you save time, lower costs, and meet your unique manufacturing requirements. For your peace of mind, all our services are performed by our global experts who have an intimate knowledge of our equipment backed by decades of experience.

Qualification Services

Our qualification services are designed to make the integration of our system into your process as seamless as possible and ensure your equipment is properly installed and functioning per your pre-defined requirements.

• Installation Qualification/Operational Qualification (IQ/OQ)

• Performance Qualification Support (PQ)

For additional information on qualification tests, please contact your local sales representative to get the detailed Test Matrix document.

Training Services

Appropriate training for users is not only a Good Manufacturing Practices requirement, it also ensures your staff has the expertise to operate and manage the system as part of your manufacturing process. Our training offering has been designed to make your staff more autonomous in managing your system and your process while saving time and money. Our training services cover system use and programming with interactive hands-on sessions and, depending on the training you select, may also include:

• Installing the Flexware® assemblies

• Interacting with the Human Machine Interface

• Manual and automatic system operation

• Troubleshooting issues

• Managing your own recipes

• Process recommendations

• These trainings can be delivered either at your site or in our M Lab™ Collaboration Centers. Please contact your local representative or email **ilearn@merckgroup.com** to discuss our training offering.

System Service Reliance Plans

To help you ensure optimum equipment uptime while mitigating risks, we have developed a wide range of services and support that allow you to select a coverage level that best fits your needs. Our System Service Reliance Plans, a complete range of services for your systems, offer priority access to support while ensuring your equipment is properly maintained.

For additional details, please refer to the System Service Reliance Plans Data Sheet (**DS7881EN**). Available at **SigmaAldrich.com/services-plans**

Repair Services and Spare Parts

Repair Services

In the event your system experiences a problem, our worldwide engineering organization will provide on-site or repair center technical support to get you back up and running as quickly as possible.

Spare Parts

Purchasing spare parts directly from us is the only way we can guarantee that you get the right parts every time, with the same level of performance as the original. For details and ordering information, check the illustrated spare parts list (**CA7420EN**).

Specifications

Plastic Mobius® MIX Specifications

Description	10 L / 50 L	100 L	200 L	500 L
Carrier				
Materials of construction				
Tank	HDPE	LLDPE	LLDPE	LLDPE
Stand	304L stainless steel	HDPE	HDPE	HDPE
Latch	N/A	18-8 stainless steel	18-8 stainless steel	18-8 stainless steel
Casters	Polyurethane			
Dimensions				
L × W	29.5 × 25.6 in. (750 × 650 mm)	35 × 31 in. (890 × 790 mm)	38 × 32 in. (970 × 810 mm)	48 × 39 in. (1220 × 990 mm)
Height	38.4 in. (980 mm)	48 in. (1220 mm)	49 in. (1240 mm)	66 in. (1680 mm)
Weight	123 lb (56 kg)	74 lb (34 kg)	86 lb (39 kg)	200 lb (91 kg)
Minimum working volume (to cover the impeller)	1 L / 2 L	9 L	23 L	26 L
Minimum sampling volume	6.5 L / 20 L	40 L	80 L	210 L
Maximum filling volume	11 L / 55 L	110 L	220 L	550 L
Storage temperature	0–40 °C (non-condensing environment)			
Operating temperature	4–40 °C (non-condensing environment)			
Motor				
Weight	3.1 lb (1.4 kg)	10.8 lb (4.9 kg)	10.8 lb (4.9 kg)	29 lb (13.1 kg)
Electrical (max)	50 W	300 W	300 W	1200 W
Impeller Speed Operating Range*	50–1000 rpm	50–500 rpm	50–500 rpm	50–250 rpm
Cable length	9 ft (2.7 m)	10 ft (3 m)	10 ft (3 m)	10 ft (3 m)
Ingress protection rating	IP 67			
Regulatory information	CE marked			
Control Box				
Materials of construction	304L stainless steel			
Weight	24.3 lb (11 kg)	30 lb (14 kg)	30 lb (14 kg)	30 lb (14 kg)
Electrical	100–120 VAC / 200–240 VAC single phase	115/230 VAC 50/60 Hz single phase	115/230 VAC 50/60 Hz single phase	208 VAC 3 phase or 230 VAC single phase
Cable length	9 ft (2.7 m)	8 ft (2.5 m)	8 ft (2.5 m)	8 ft (2.5 m)
Ingress protection rating	IP 65	IP 65	IP 65	IP 55
Regulatory information	CE marked			

* ±10 rpm accuracy. Reaching maximum speed is only possible when impeller is submerged with liquid. Maximum operating speed has to be validated for each process individually, depending on volume, viscosity, etc.

Stainless Steel Mobius® MIX Specifications

Description	100 L	200 L	500 L	1000 L
Carrier				
Materials of construction				
Tank	304L stainless steel			
Stand	304L stainless steel			
Latch	18-8 stainless steel			
Casters	304L stainless steel			
Dimensions				
L × W	33 × 26 in. (830 × 670 mm)	37 × 31 in. (940 × 790 mm)	46 × 41 in. (1170 × 1050 mm)	58 × 49 in. (1470 × 1240 mm)
Height	53 in. (1350 mm)	55 in. (1400 mm)	68 in. (1730 mm)	73 in. (1860 mm)
Weight	410 lb (186 kg)	485 lb (220 kg)	825 lb (374 kg)	1200 lb (544 kg)
Minimum working volume (to cover the impeller)	9 L	23 L	26 L	25 L
Minimum sampling volume	40 L	80 L	210 L	290 L
Maximum filling volume	110 L	220 L	550 L	1100 L
Fluid volume in jacket (approx.)	1.6 gal (6 L)	2.1 gal (7.8 L)	4.4 gal (16.8 L)	5.4 gal (20.5 L)
Heat transfer area of jacket (approx.)	10.4 sq. ft (0.97 sq. m)	13.2 sq. ft (1.23 sq. m)	28.5 sq. ft (2.65 sq. m)	34.9 sq. ft (3.24 sq. m)
Operating pressure of jacket	90 psi (6,2 bar)			
Stainless steel jacketed mixers ASME U-1 code stamped	Optional			
Mettler Toledo SWB505 MultiMount™ load cells (qty 3)	0–100 kg ±1% FS	0–200 kg ±1% FS	0–500 kg ±1% FS	0–1000 kg ±1% FS
Load Cell Ingress protection rating	IP 68			
RTD temperature sensor JUMO	0–60 °C ± 1 °C			
Single-use pH sensor Hamilton®	3–10 pH ±0.15 pH from 0 to 18 months 3–10 pH ±0.2 pH from 18 to 24 months After product calibration at ±1 pH around calibration point: 3–10 pH ±0.1 pH from 0 to 18 months 3–10 pH ±0.15 pH from 18 to 24 months			
Multi-use pH sensor Hamilton®	0–14 pH ±0.1 pH			
Single-use Conductivity sensor Hamilton®	0.1–100 mS/cm ±5% MV 100–200 mS/cm ±8% MV 200–300 mS/cm ±10% MV			
Multi-use Conductivity sensor Hamilton®	0.1–100 mS/cm ±3% MV 100–300 mS/cm ±5% MV			
Storage temperature	0–40 °C (non-condensing environment)			
Operating temperature	4–60 °C (non-condensing environment)			
Motor				
Weight	10.8 lb (4.9 kg)	10.8 lb (4.9 kg)	29 lb (13.1 kg)	29 lb (13.1 kg)
Electrical (max)	300 W	300 W	1200 W	1200 W
Impeller Speed Operating Range*	50–500 rpm	50–500 rpm	50–250 rpm	50–250 rpm
Cable length	10 ft (3 m)			
Ingress protection rating	IP 67			
Regulatory information	CE marked			

Description	100 L	200 L	500 L	1000 L
Standard Control Box				
Materials of construction	304L stainless steel			
Weight	30 lb (14 kg)			
Electrical	115/230 VAC 50/60 Hz single phase	115/230 VAC 50/60 Hz single phase	208 VAC 3 phase or 230 VAC single phase	208 VAC 3 phase or 230 VAC single phase
Cable length	8 ft (2.5 m)			
Ingress protection rating	IP 65	IP 65	IP 55	IP 55
Regulatory information	CE marked			
Ready To Connect Control Box				
Materials of construction	304L stainless steel			
Dimensions				
L × W	29 × 22 in. (740 × 570 mm)			
Height	49 in. (1240 mm)			
Weight	238 lb (108 kg)			
Electrical	100–240 VAC, 50/60 Hz, 7.7/4.4 A single phase	100–240 VAC, 50/60 Hz, 7.7/4.4 A single phase	200–240 VAC, 50/60 Hz, 9.8 A single phase 200–208 VAC, 3 Phase, 8.3 A (North America)	200–240 VAC, 50/60 Hz, 9.8 A single phase 200–208 VAC, 3 Phase, 8.3 A (North America)
Cable length	16 ft (4.9 m)			
Ingress protection rating	IP 55			
Regulatory information	CE Marked			
Data Recorder Eurotherm	Optional			

* ±10 rpm accuracy. Reaching maximum speed is only possible when impeller is submerged with liquid. Maximum operating speed has to be validated for each process individually, depending on volume, viscosity, etc.

Mobius® MIX single-use assembly materials of construction

Bag	
Mobius® MIX Bags	PureFlex™ film, PureFlex™ Plus film or Ultimus® film, PP impeller, HDPE impeller cup, PE and/or Polyolefin ports, silicone o-ring/gasket
PureFlex™ film, PureFlex™ Plus film, Ultimus® film	Ultra Low Density Polyethylene (ULDPE)
Hamilton® single-use conductivity sensor	HDPE, Platinum, Glass, Ceramic
Tubing	
Pharma 50 Tubing	Silicone
Pharma-65 Tubing	Silicone
C-Flex® Tubing	Thermoplastic Elastomer (TPE)
NovaSeptum® Products	
NovaSeptum® 2D Bags	PureFlex™ film, HDPE
NovaSeptum® Sampling Bags	PureFlex™ film, Thermoplastic Elastomer (TPE), Polycarbonate, Polyimide, Polysulfone, Polyethylene
SmartSite® Valve	Acrylic
Other components	
Caps	Polypropylene
Colder Quick Connect Fittings	Polycarbonate, Polysulfone, Polyethylene, Silicone
Gaskets	Platinum-cured silicone
Luers	PVDF, Polypropylene
Tri-Clamp to Hose Barb Adapters	Polypropylene, Silicone
Port Plugs	Polypropylene
AseptiQuik® connector	Polycarbonate, Silicone seal
Hamilton® single-use pH sensor	Glass, Silicone O-ring

Ordering Information

Plastic Mobius® MIX Carriers

	MIX10	MIX50	MIX10/50	MIX100	MIX200	MIX500
Complete plastic Mobius® MIX system (Includes carrier, control box, motor and hand-held control)						
100–120 VAC / 200–240 VAC	SN5MIX10EL1	SN5MIX50EL1	SN5MIX1050EL1			
115 V, 50/60 HZ				MIX0100L100	MIX0200L100	
208 V, 50/60 HZ						MIX0500L100
230 V, 50/60 HZ				MIX0100L101	MIX0200L101	MIX0500L101
Carrier Only						
HDPE Carrier	SN5MIX10EL0	SN5MIX50EL0	SN5MIX1050EL0			
LDPE Carrier				MIX0100L102	MIX0200L102	MIX0500L102
Control Box						
Control box unit, 120/240 V (includes electrical power cord with EU, UK and US plug)	SN5SPKCTRLBX	SN5SPKCTRLBX	SN5SPKCTRLBX			
Control box unit, 115 V (includes electrical power cord with US plug)				MIX0200L103	MIX0200L103	
Control box unit, 3× 208 V (includes electrical power cord without plug)						MIX0500L103
Control box unit, 230 V (includes electrical power cord with EU and UK plug)				MIX0200L104	MIX0200L104	MIX0500L104
Motor						
Motor	SN5SPKEL1MIXER	SN5SPKEL1MIXER	SN5SPKEL1MIXER	MIX0200L107	MIX0200L107	MIX0500L107
Hand control						
Hand-held control and cable	MIX0200L106	MIX0200L106	MIX0200L106	MIX0200L106	MIX0200L106	MIX0200L106
Accessories						
Electrical power cord adapter kit*	MIX0200L108	MIX0200L108	MIX0200L108	MIX0200L108	MIX0200L108	–

* **Kit of power cords with plugs for countries:** Argentina, Australia, New Zealand, Denmark, Israel, Chile, Italy, India, S. Africa and Switzerland.

Stainless Steel Mobius® MIX Carriers with Standard Control box
A complete system is made up of carrier, control box, motor and hand-held control

	MIX100	MIX200	MIX500	MIX1000
Carrier Only				
Stainless steel jacketed	MIXJ100L102	MIXJ200L102	MIXJ500L102	MIXJ1000L102
Stainless steel jacketed, ASME certified	MIXJ100L102A	MIXJ200L102A	MIXJ500L102A	MIXJ1000L102A
Stainless steel jacketed with load cells	MIXJ100L102L	MIXJ200L102L	MIXJ500L102L	MIXJ1000L102L
Stainless steel jacketed, ASME certified and load cells	MIXJ100L102LA	MIXJ200L102LA	MIXJ500L102LA	MIXJ1000L102LA
Stainless steel unjacketed	MIXU100L102	MIXU200L102	MIXU500L102	MIXU1000L102
Stainless steel unjacketed with load cells	MIXU100L102L	MIXU200L102L	MIXU500L102L	MIXU1000L102L
Control Box				
Control box unit, 115 V (includes electrical power cord with US plug)	MIX0200L103	MIX0200L103		
Control box unit, 3× 208 V (includes electrical power cord without plug)			MIX0500L103	MIX0500L103
Control box unit, 230 V (includes electrical power cord with EU and UK plug)	MIX0200L104	MIX0200L104	MIX0500L104	MIX0500L104
Motor				
Motor	MIX0200L107	MIX0200L107	MIX0500L107	MIX0500L107
Hand control				
Hand-held control and cable	MIX0200L106	MIX0200L106	MIX0200L106	MIX0200L106
Accessories				
Electrical power cord adapter kit*	MIX0200L108	MIX0200L108	—	—

* Kit of power cords with plugs for countries: Argentina, Australia, New Zealand, Denmark, Israel, Chile, Italy, India, S. Africa and Switzerland.

Single-Use Assemblies to Fit Mobius® 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	1/2" ID Silicone tubing – 36" + 1.5" SterilEnz® TC	3/4" ID Silicone tubing – 36" + 1.5" SterilEnz® TC	1" ID Silicone tubing – 36" + 1.5" TC	2" ID Bung port + Plug	4" TC Powder port + Cap	1/2" ID Silicone tubing – 60" + 1.5" SterilEnz® TC	3/4" ID Silicone tubing – 60" + 1.5" SterilEnz® TC	Needle Free Sample Port + NovaSeptum® NS711-10250 – 250 mL BAG
10 L		MIX0010LB05	√		Bronze	5		1	1			1		1		
		MIX0010LG05	√		Gold	5		1	1					1		
		MIX0010LSG05	√		Gold	5		1	1					1		1
		MIX0010LLIN		√	Bronze	5								1		
50 L		MIX0050LB05	√		Bronze	5		1	1			1		1	1	
		MIX0050LG05	√		Gold	5		1	1						1	
		MIX0050LSPB05	√		Bronze	5		1	1				1	1	1	1
		MIX0050LSG05	√		Gold	5		1	1						1	1
		MIX0050LLIN		√	Bronze	5									1	
100 L	PureFlex™	MIX0100LB05	√		Bronze	5	1	1			1	1		1		
		MIX0100LG05	√		Gold	5	1	1		1	1			1		
		MIX0100LSPB04	√		Bronze	4	1	1				1	1	1		2
		MIX0100LSG04	√		Gold	4	1	1		1	1			1		2
		MIX0100LLIN		√	Bronze	5								1		
200 L		MIX0200LB05	√		Bronze	5	1	1			1	1		1		
		MIX0200LG05	√		Gold	5	1	1		1	1			1		
		MIX0200LSPB04	√		Bronze	4	1	1				1	1	1		2
		MIX0200LSG04	√		Gold	4	1	1		1	1			1		2
		MIX0200LLIN		√	Bronze	5								1		

Volume	Film	Part Code	Closed Top Bag	Liner	Certification	Qty / Pk	Top Ports							Bottom Port		Side Ports
							1/2" ID Silicone tubing – 36" + Female Colder MPX + Plug	3/4" ID Silicone tubing – 36" + Female Colder MPU + Plug	3/4" ID Silicone tubing – 66" + Female Colder MPU + Plug	1" ID Silicone tubing – 36" + 1.5" TC	1" ID Silicone tubing – 66" + 1.5" TC	2" ID Bung port	4" TC Powder port	1" ID Silicone tubing – 60" + 1.5" TC	1" ID Silicone tubing – 66" + 1.5" TC	Needle Free Sample Port + NovaSeptum® – 250 mL BAG
500 L		MIX0500LB04	√		Bronze	4	1	1		1		1		1		
		MIX0500LG04	√		Gold	4	1	1		1				1		
	PureFlex™	MIX0500LSPB04	√		Bronze	4	1	1		1		1		1		2
		MIX0500LSG04	√		Gold	4	1	1		1				1		2
		MIX0500LLIN		√	Bronze	4								1		
1000 L		MIX1000LSPB03	√		Bronze	3			1		2	1			1	3
		MIX1000LSPG03	√		Gold	3			1		2	1			1	3

Stainless Steel Mobius® MIX Carriers with Ready To Connect Control Box
A complete system is made up of carrier, control box, motor and power cord

	MIX100	MIX200	MIX500	MIX1000
Carrier Only				
Stainless steel jacketed with temperature sensor and load cells	SMIXJ100TLEU	SMIXJ200TLEU	SMIXJ500TLEU	SMIXJ1000TLEU
Stainless steel jacketed, ASME certified with temperature sensor and load cells	SMIXJ100TLA	SMIXJ200TLA	SMIXJ500TLA	SMIXJ1000TLA
Control Box				
Control box unit, 115/230 V (1PH)-50/60 Hz	SMCBMMC3V4EU	SMCBMMC3V4EU		
Control box unit, 115/230 V (1PH)-50/60 Hz-Sensor Pack (pH & Conductivity)	SMCBMMC3V4SEU	SMCBMMC3V4SEU		
Control box unit, 115/230 V (1PH)-50/60 Hz-Data Recorder	SMCBMMC3V4REU	SMCBMMC3V4REU		
Control box unit, 115/230 V (1PH)-50/60 Hz-Sensor Pack (pH & Conductivity)-Data Recorder	SMCBMMC3V4SREU	SMCBMMC3V4SREU		
Control box unit, 208 V (3PH)-60 Hz			SMCBMMC4V2EU	SMCBMMC4V2EU
Control box unit, 208 V (3PH)-60 Hz-Sensor Pack (pH & Conductivity)			SMCBMMC4V2SEU	SMCBMMC4V2SEU
Control box unit, 208 V (3PH)-60 Hz-Data Recorder			SMCBMMC4V2REU	SMCBMMC4V2REU
Control box unit, 208 V (3PH) Hz-Sensor Pack (pH & Conductivity)-Data Recorder			SMCBMMC4V2SREU	SMCBMMC4V2SREU
Control box unit, 230 V (1PH)-50 Hz			SMCBMMC4V3EU	SMCBMMC4V3EU
Control box unit, 230 V (1PH)-50 Hz-Sensor Pack (pH & Conductivity)			SMCBMMC4V3SEU	SMCBMMC4V3SEU
Control box unit, 230 V (1PH)-50 Hz-Data Recorder			SMCBMMC4V3REU	SMCBMMC4V3REU
Control box unit, 230 V (1PH)-50 Hz-Sensor Pack (pH & Conductivity)-Data Recorder			SMCBMMC4V3SREU	SMCBMMC4V3SREU
Motor				
Motor	MIX0200L107	MIX0200L107	MIX0500L107	MIX0500L107
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			
South Korea Plug Type F	SMPCKR			
Single Phase No Plug	SMPC1FLEU			
3Phase No Plug	SMPC3FLEU			
Single Phase No Plug for North America	SMPC1FLUS			
3Phase No Plug for North America	SMPC3FLUS			

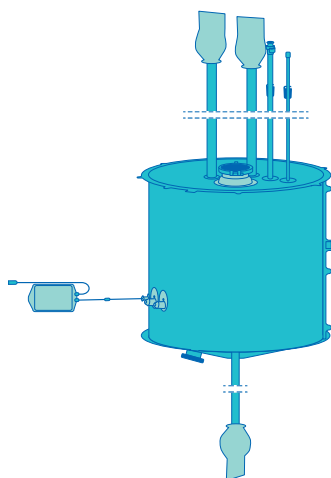**For Mobius® MIX Carriers with Smart control box please contact your sales representative for a quotation.**

Single-Use Assemblies to Fit Mobius® MIX Carriers with Ready To Connect and Smart Control Boxes

							Top Ports					Bottom Port	Side Ports				
Volume	Film	Part Code	Closed Top Bag	Liner	Certification	Qty / Pk	1/4" ID Silicone tubing – 36" + 1/4" Female Luer + Cap	1/2" ID Silicone tubing – 36" + Female Colder MPX + Plug	3/4" ID Silicone tubing – 36" + 1.5" SterilEnz® TC + Cap	1" ID Silicone tubing – 36" + 1.5" TC + Cap	4" TC Powder port + Cap	3/4" ID Silicone tubing – 60" + 1.5" SterilEnz® TC + Cap	Needle Free Sample Port + Nova Septum® NS711-10250 – 250 mL BAG	Needle Free Sample Port + AseptiQuik® S for Nova Septum® SURe Sampling Assemblies	Probe port for Multi-Use Sensor + Cap	Single-Use pH sensor*	Single-Use Conductivity sensor*
100 L	PureFlex™	SMIX0100LB4M	√		Bronze	4	1	1	1	1	1	1	1		2		
		SMIX0100LS4M	√		Silver	4	1	1	1	1	1	1	1		2		
		SMIX0100LG4M	√		Gold	4	1	1	1	1	1	1	1		2		
		SMIXL0100LB4M		√	Bronze	4						1	1		2		
		SMIX0100LB4S	√		Bronze	4	1	1	1	1	1	1		1		1	1
		SMIX0100LS4S	√		Silver	4	1	1	1	1	1	1		1		1	1
		SMIXL0100LB4S		√	Bronze	4						1		1		1	1
	Ultimus®	SMIX0100LSU2M	√		Silver	2	1	1	1	1	1	1		1	2		
		SMIX0100LGU2M	√		Gold	2	1	1	1	1	1	1		1	2		
		SMIX0100LSU2S	√		Silver	2	1	1	1	1	1	1		1		1	1
		SMIX0100LGU2S	√		Gold	2	1	1	1	1	1	1		1		1	1
200 L	PureFlex™	SMIX0200LB4M	√		Bronze	4	1	1	1	1	1	1	1		2		
		SMIX0200LS4M	√		Silver	4	1	1	1	1	1	1	1		2		
		SMIX0200LG4M	√		Gold	4	1	1	1	1	1	1	1		2		
		SMIXL0200LB4M		√	Bronze	4						1	1		2		
		SMIX0200LB4S	√		Bronze	4	1	1	1	1	1	1		1		1	1
		SMIX0200LS4S	√		Silver	4	1	1	1	1	1	1		1		1	1
		SMIXL0200LB4S		√	Bronze	4						1		1		1	1
	Ultimus®	SMIX0200LSU2M	√		Silver	2	1	1	1	1	1	1		1	2		
		SMIX0200LGU2M	√		Gold	2	1	1	1	1	1	1		1	2		
		SMIX0200LSU2S	√		Silver	2	1	1	1	1	1	1		1		1	1
		SMIX0200LGU2S	√		Gold	2	1	1	1	1	1	1		1		1	1

* Compatible with Smart control box only

Volume	Film	Part Code	Closed Top Bag	Liner	Certification	Qty / Pk	1/2" ID Silicone tubing – 36" + Female Colder MPX + Plug	3/4" ID Silicone tubing – 36" + Female Colder MPU + Plug	3/4" ID Silicone tubing – 60" + Female Colder MPU + Plug	1" ID Silicone tubing – 36" + 1.5" TC + Cap	1" ID Silicone tubing – 60" + 1.5" TC + Cap	4" TC Powder port + Cap	1" ID Silicone tubing – 60" + 1.5" TC + Cap	Needle Free Sample Port + NovaSeptum® NS711-10250 – 250 mL BAG	Needle Free Sample Port + AseptiQuik® S for NovaSeptum® SURe Sampling Assemblies	Probe port for Multi-Use Sensor + Cap	Single-Use pH sensor*	Single-Use Conductivity sensor*
							Top Ports						Bottom Port	Side Ports				
500 L	PureFlex™	SMIX0500LB3M	√		Bronze	3	1	1		2		1	1	1		2		
		SMIX0500LS3M	√		Silver	3	1	1		2		1	1	1		2		
		SMIX0500LG3M	√		Gold	3	1	1		2		1	1	1		2		
		SMIXL0500LB3M		√	Bronze	3							1	1		2		
		SMIX0500LB3S	√		Bronze	3	1	1		2		1	1		1		1	1
		SMIX0500LS3S	√		Silver	3	1	1		2		1	1		1		1	1
		SMIXL0500LB3S		√	Bronze	3							1		1		1	1
	Ultimus®	SMIX0500LSU2M	√		Silver	2	1	1		2		1	1		1	2		
		SMIX0500LGU2M	√		Gold	2	1	1		2		1	1		1	2		
		SMIX0500LSU2S	√		Silver	2	1	1		2		1	1		1		1	1
		SMIX0500LGU2S	√		Gold	2	1	1		2		1	1		1		1	1
1000 L	PureFlex™	SMIX1000LB3M	√		Bronze	3			1		3	1	1	1		2		
		SMIX1000LS3M	√		Silver	3			1		3	1	1	1		2		
		SMIX1000LG3M	√		Gold	3			1		3	1	1	1		2		
		SMIXL1000LB3M		√	Bronze	3							1	1		2		
		SMIX1000LB3S	√		Bronze	3			1		3	1	1		1		1	1
		SMIX1000LS3S	√		Silver	3			1		3	1	1		1		1	1
		SMIXL1000LB3S		√	Bronze	3							1		1		1	1
	Ultimus®	SMIX1000LSU1M	√		Silver	1			1		3	1	1		1	2		
		SMIX1000LGU1M	√		Gold	1			1		3	1	1		1	2		
		SMIX1000LSU1S	√		Silver	1			1		3	1	1		1		1	1
		SMIX1000LGU1S	√		Gold	1			1		3	1	1		1		1	1

* Compatible with Smart control box only

Example of 200 L single-use assembly

Learn more at

SigmaAldrich.com/mixers

We have built a unique collection of life science brands with
unrivalled experience in supporting your scientific advancements.

Millipore® **Sigma-Aldrich**® **Supelco**® **Milli-Q**® **SAFC**® **BioReliance**®