

# 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



#### **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<sup>®</sup> 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 predefined 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		Polyt	urethane									
Dimensions												
L×W	29.5 × 25.6 in. (750 × 650 mm)	$35 \times 31$ in. (890 × 790 mm)	$38 \times 32$ in. (970 × 810 mm)	$48 \times 39$ 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-con	densing 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		I	P 67									
Regulatory information		CE	marked									
Control Box												
Materials of construction		304L sta	ainless 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									

 $<sup>^*</sup>$   $\pm 10$  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		•	5 pH from 0 to 18 months	
Hamilton®	After product c	· ·	pH from 18 to 24 months libration point: $3-10$ pH $\pm 0.1$	ny from 0 to 19 months
	Arter product c	•	pH from 18 to 24 months	pri from 0 to 10 months
Multi-use pH sensor Hamilton®			4 pH ±0.1 pH	
Single-use Conductivity		0.1-100	0 mS/cm ±5% MV	
sensor Hamilton®		100-20	0 mS/cm ±8% MV	
		200-300	mS/cm ±10% MV	
Multi-use Conductivity sensor Hamilton®			0 mS/cm ±3% MV 0 mS/cm ±5% MV	
Storage temperature		0-40 °C (non-	condensing environment)	
Operating temperature			condensing environment)	
Motor			<u> </u>	
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 sta	ainless 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 sta	ainless steel								
Dimensions											
$L \times W$		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	200–240 VAC, 50/60 Hz, 9.8 A single phase							
			200–208 VAC, 3 Phase, 8.3 A (North America)	200–208 VAC, 3 Phase, 8.3 A (North America)							
Cable length		16 ft	(4.9 m)								
Ingress protection rating		I	P 55								
Regulatory information	CE Marked										
Data Recorder Eurotherm		Op	otional								

 $<sup>^*</sup>$   $\pm 10$  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 <sup>™</sup> film, PureFlex <sup>™</sup> Plus film or Ultimus <sup>®</sup> 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
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# **Ordering Information**

# **Plastic Mobius® MIX Carriers**

	MIX10	MIX50	MIX10/50	MIX100	MIX200	MIX500
Complete plastic Mobius® MIX sy	stem (Includes car	rier, control box, mo	otor 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	

<sup>\*</sup> 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	_	_

<sup>\*</sup> 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

								Top Ports							n Port	Side Ports
Volume	Film	Part Code	Closed Top Bag	Liner	Certification	Qty / Pk	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
		MIX0010LB05	$\checkmark$		Bronze	5		1	1			1		1		
10 L		MIX0010LG05	√		Gold	5		1	1					1		
10 L		MIX0010LSG05	$\checkmark$		Gold	5		1	1					1		1
		MIX0010LLIN		√	Bronze	5								1		
		MIX0050LB05	√		Bronze	5		1	1			1			1	
		MIX0050LG05	√		Gold	5		1	1						1	
50 L		MIX0050LSPB05	√		Bronze	5		1	1				1		1	1
		MIX0050LSG05	√		Gold	5		1	1						1	1
		MIX0050LLIN		√	Bronze	5									1	
	PureFlex™	MIX0100LB05	√		Bronze	5	1	1		1		1		1		
		MIX0100LG05	<b>√</b>		Gold	5	1	1		1	1			1		
100 L		MIX0100LSPB04	<b>√</b>		Bronze	4	1	1			1		1	1		2
		MIX0100LSG04	√	,	Gold	4	1	1		1	1			1		2
		MIX0100LLIN		√	Bronze	5								1		
		MIX0200LB05	√ 		Bronze	5	1	1		1		1		1		
200 :		MIX0200LG05	<u>√</u>		Gold	5	1	1		1	1		-	1		
200 L		MIX0200LSPB04	√ /		Bronze	4	1	1			1		1	1		2
		MIX0200LSG04	√		Gold	4	1	1		1	1			1		2
-		MIX0200LLIN		√	Bronze	5								1		

									Тор Р		Botto	m Port	Side Ports		
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 – 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
		MIX0500LB04	$\checkmark$		Bronze	4	1	1		1		1	1		
		MIX0500LG04	√		Gold	4	1	1		1			1		
500 L		MIX0500LSPB04	√		Bronze	4	1	1		1		1	1		2
	PureFlex™	MIX0500LSG04	$\checkmark$		Gold	4	1	1		1			1		2
	_	MIX0500LLIN		√	Bronze	4							1		
1000 L		MIX1000LSPB03	$\checkmark$		Bronze	3			1		2	1		1	3
1000 L		MIX1000LSPG03	$\checkmark$		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.

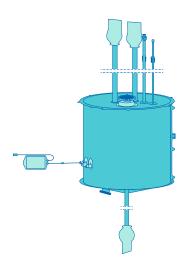
Single-Use Assemblies to Fit Mobius® MIX Carriers with Ready To Connect and Smart Control Boxes

								То	p Ports	5		Bottom Port	Side	e 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 <sup>®</sup> 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	<b>√</b>		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	<b>√</b>		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		$\checkmark$	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		$\checkmark$	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

<sup>\*</sup> Compatible with Smart control box only

									Тор Ро	orts			Bottom Port	Side	Ports			
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*
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		$\checkmark$	Bronze	3							1		1		1	1
	PureFlex™	SMIX1000LBPL3M	√		Bronze	3			1		3	1	1	1		2		
	Plus	SMIX1000LSPL3M	√		Silver	3			1		3	1	1	1		2		
		SMIX1000LGPL3M	√		Gold	3			1		3	1	1	1		2		
-		SMIXL1000LBPL3M		√	Bronze	3							1	1		2		

<sup>\*</sup> Compatible with Smart control box only



Example of 200 L single-use assembly

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