

# DuoMixer® SINGLE USE MIXING

The DuoMixer® is an advanced single use mixer designed for mixing applications such as media and buffer formulation, intermediate processing, drug substance purification and drug product formulation. The unique impeller design and servo motor are based on high performance magnetic mixing technology that is fast and powerful for effective mixing of powders and viscous products.



## MODELS AVAILABLE (CAPACITY):

- ◆ DuoMixer® (50 - 3,000L)
- ◆ MiniDuoMix® (2 - 20L)



## SCALABILITY AND EASE OF USE FOR ALL MIXING APPLICATIONS

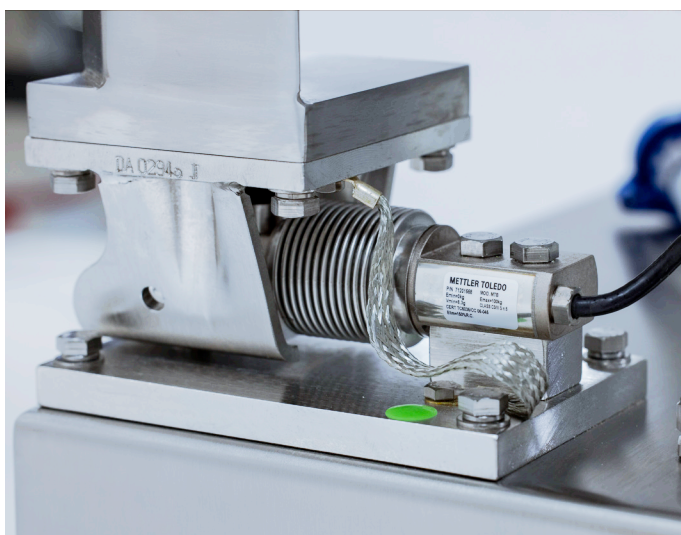
DuoMixer® high-performance mixing technology is available from 2 L to 3,000 L allowing for flexibility and scalability for every mixing process step. Each DuoMixer® features an integrated drive unit with 15" touchscreen for ease of use. Optional features include load cells for weighing, jackets for heat exchange and sensors for intelligent in-line measurement of pH, temperature, and conductivity.



3" OR 4" PORT FOR POWDER ADDITION



DUOMIX® 15" HMI TOUCHSCREEN



WEIGHING MEASUREMENT AND CONTROL VIA LOADCELL



EASY BAG INSTALLATION

# MiniDuoMix® FOR WEIGHING

## OVERVIEW

The MiniDuoMix® is a benchtop mixer for liquid-liquid and liquid-solid mixing from 2 L to 20 L for cGMP manufacturing:

- ◆ Standard automation modules for stirring and weighing
- ◆ Optional modules for pH and conductivity monitoring are available
- ◆ HMI touchscreen and user-friendly software for automated control of modules, user permissions, password management, data charts, alarm and calibration
- ◆ Install bag and start processing in minutes

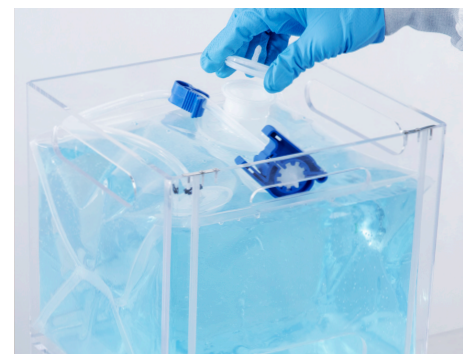
DESCRIPTION	SPECIFICATION
<b>Material of Construction</b>	
Mixer Drive Base	ABS
Mixer Tank Holder	Acrylic
Mixing Volumes	2 L   5 L   10 L   20 L
Impeller Range	0 to 500 RPM
Footprint (L x W)	20 x 14 in. (502 x 350 mm)
Height	22 in. (550 mm)
Weight	25 Lbs. (11.4 Kg)
Voltage	120 Volts
Current	2.5 Amps
Power	300 Watts
Operating Temperature	0°C to 60°C
Data Panel Interface Connection	USB



MINIDUOMIX® WITH HMI TOUCHSCREEN



WEIGHING MEASUREMENT AND CONTROL VIA LOADCELL



EASY INSTALLATION OF BAG

## MIXER CONFIGURATOR OPTIONS

Please use the configurator to design your specific mixing system. Contact our sales representatives and application specialists to assist you with the optimal MiniDuoMix® design for your process application.

EXAMPLE PRODUCT ID:

USMINIMIX 1B SA 2S HP HC T P

Controller	Mixer Base	Acrylic Holders	Stainless Steel Jacketed Holders	pH Measurement	Conductivity Measurement	Temperature Measurement	Printer and Paper
MINIMIX= DuoMini Controller Unit	1B = DuoMini Mixer Base	SA = Acrylic Holder Set	2S = 2L SS Jacketed Holder	HP = DuoMini Reusable pH Sensor - Hamilton	HC = DuoMini Reusable Conductivity Sensor - Hamilton	T = DuoMini PT100 Temperature Sensor	P = Printer and Printer Paper
	2B = 2 DuoMini Mixer Bases	2A = 2L Acrylic Holder	5S = 5L SS Jacketed Holder				
	3B = 3 DuoMini Mixer Bases	5A = 5L Acrylic Holder	10S = 10L SS Jacketed Holder	MC = DuoMini Reusable Conductivity Sensor - Mettler Toledo			
		10A = 10L Acrylic Holder	20S = 20L SS Jacketed Holder				
	20A = 20L Acrylic Holder						
	(OPTIONAL)	(OPTIONAL)	(OPTIONAL)	(OPTIONAL)	(OPTIONAL)	(OPTIONAL)	(OPTIONAL)

# DuoMixer® FOR WEIGHING

# SPECIFICATIONS

The DuoMixer® is a floor mixer for liquid-liquid and liquid-solid mixing from 50 L to 3,000 L for cGMP manufacturing:



- ◆ Standard automation modules for stirring and weighing
- ◆ Optional modules for pH, temperature and conductivity monitoring are available
- ◆ Optional hardware for printing and acid & base addition (2 pump heads)
- ◆ Available with or without jacket
- ◆ 15" HMI touchscreen and user-friendly software for automated control of modules, user permissions, password management, data charts, alarm and calibration
- ◆ Install bag and start processing in minutes
- ◆ Minimum working volume is 10% to 20% of mixer working volume

## MATERIAL OF CONSTRUCTION

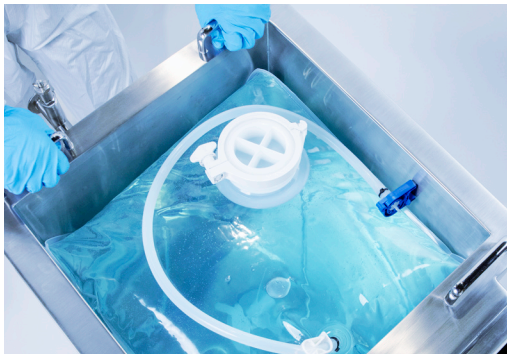
DESCRIPTION	SPECIFICATION
Mixer Tank	304L Stainless Steel
Windows	Polycarbonate
Surface Finish	Acid Cleaned, Brushed Stainless Steel
Mixing Volume	50 L   100 L   200 L   300 L   500 L   1,000 L   1,500 L   2,000 L   2,500 L   3,000 L
Impeller Range	50 L to 300 L: 240 RPM   500 L to 3,000 L: 200 RPM
Voltage	120 Volts
Current	for Volume ≥ 1,000 L, 16.7 Amps; for Volume < 1,000 L, 8.5 Amps
Power	for Volume ≥ 1,000 L, 2000 Watts; for Volume < 1,000 L, 1000 Watts
Operating Temperature	0°C to 60°C
Mobility: 50 L to 1,000 L	Tank on Stainless Cart with Handles and Cleanroom Wheels
Mobility: 1,500 L to 3,000 L	Tank on Stainless Cart with Fixed Feet
Integrated Load Cells	Mettler Toledo, SWB-505
Load Cell Ingress Protection (IP) Rating	IP68
HMI	15" Touchscreen
Data Panel Interface Connections	RS232, DB9, RJ45, USB
RTD Temperature Sensor	GTAM, PT100, 3mm, TIT-MPA3B1
pH Sensor	Mettler Toledo, inPro3100i
Conductivity Sensor	Mettler Toledo, inPro7100i
Printer	BrightTek, WH-E36
Acid Base Pumps	Watson Marlow 313D or 314D

# DuoMixer® FOR WEIGHING

# SPECIFICATIONS

## DIMENSIONS, WEIGHT, WEIGHING CAPACITY & ACCURACY

VOLUME	APPROX. DIMENSIONS MM (IN.) L X W X H	WEIGHT KG (LBS.)	MAX CAPACITY (KG)	ACCURACY
50 L	875 x 519 x 1,175 (34 x 20 x 46)	120 (265)	200	C3 (0.0230%)
100 L	922 x 615 x 1,195 (26 x 24 x 47)	135 (298)	400	C3 (0.0230%)
200 L	1,040 x 730 x 1,205 (41 x 29 x 47.5)	155 (342)	400	C3 (0.0230%)
300 L	1,140 x 835 x 1,342 (45 x 33 x 53)	200 (441)	880	C3 (0.0230%)
500 L	1,385 x 985 x 1,402 (54 x 39 x 55)	300 (661)	2200	C3 (0.0230%)
1,000 L	1,507 x 1,154 x 1,532 (59 x 45 x 60)	350 (772)	2200	C3 (0.0230%)
1,500 L	1,700 x 1,445 x 1,491 (67 x 57 x 59)	400 (882)	2200	C3 (0.0230%)
2,000 L	2,593 x 1,308 x 1,412 (102 x 52 x 56)	495 (1,091)	4400	C3 (0.0230%)
2,500 L	2,602 x 1,302 x 1,573 (102 x 51 x 62)	545 (1,202)	4400	C3 (0.0230%)
3,000 L	2,608 x 1,368 x 1,762 (102 x 54 x 69)	600 (1,323)	4400	C3 (0.0230%)



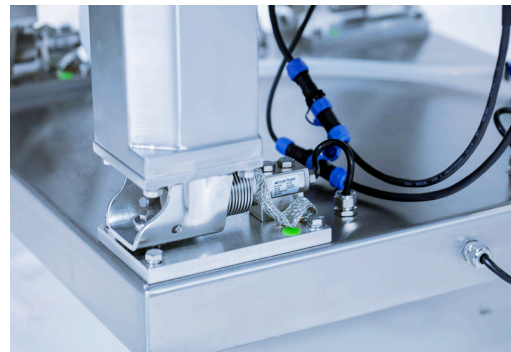
EASY INSTALLATION OF BAG



DUOMIXER® 15" HMI TOUCHSCREEN



3" OR 4" PORT FOR POWDER ADDITION



WEIGHING MEASUREMENT & CONTROL VIA LOADCELL

## MATERIAL OF CONSTRUCTION

DESCRIPTION	SPECIFICATION
Mixer Tank	304L Stainless Steel
Windows	Polycarbonate
Surface Finish	Acid Cleaned, Brushed Stainless Steel
Mixing Volume	50 L   100 L   200 L   300 L   500 L   1,000 L   1,500 L   2,000 L   2,500 L   3,000 L
Impeller Range	50 L to 300 L: 240 RPM   500 L to 3,000 L: 200 RPM
Voltage	120 Volts
Current	for Volume ≥ 1,000 L, 16.7 Amps; for Volume < 1,000 L, 8.5 Amps
Power	for Volume ≥ 1,000 L, 2000 Watts; for Volume < 1,000 L, 1000 Watts
Operating Temperature	0°C to 60°C
Mobility: 50 L to 1,000 L	Tank on Stainless Cart with Handles and Cleanroom Wheels
Mobility: 1,500 L to 3,000 L	Tank on Stainless Cart with Fixed Feet
Integrated Load Cells	Mettler Toledo, SWB-505
Load Cell Ingress Protection (IP) Rating	IP68
HMI	15" Touchscreen
Data Panel Interface Connections	RS232, DB9, RJ45, USB
RTD Temperature Sensor	GTAM, PT100, 3mm, TIT-MPA3B1
pH Sensor	Mettler Toledo, inPro3100i
Conductivity Sensor	Mettler Toledo, inPro7100i
Printer	BrightTek, WH-E36
Acid Base Pumps	Watson Marlow 313D or 314D

## DIMENSIONS, WEIGHT, WEIGHING CAPACITY & ACCURACY

VOLUME	APPROX. DIMENSIONS MM (IN.) L X W X H	WEIGHT KG (LBS.)	MAX CAPACITY (KG)	ACCURACY
50 L	977 x 529 x 1,155 (38 x 21 x 46)	150 (331)	200	C3 (0.0230%)
100 L	1,059 x 600 x 1,175 (42 x 24 x 46)	190 (419)	400	C3 (0.0230%)
200 L	1,131 x 729 x 1,237 (45 x 29 x 49)	230 (507)	400	C3 (0.0230%)
300 L	1,233 x 834 x 1,320 (49 x 33 x 52)	270 (595)	880	C3 (0.0230%)
500 L	1,496 x 1,028 x 1,467 (59 x 41 x 58)	515 (1,135)	2200	C3 (0.0230%)
1,000 L	1,577 x 1,160 x 1,452 (62 x 46 x 57)	630 (1,389)	2200	C3 (0.0230%)
1,500 L	1,761 x 1,450 x 1,524 (69 x 57 x 60)	790 (1,742)	2200	C3 (0.0230%)
2,000 L	2,604 x 1,338 x 1,442 (103 x 53 x 57)	1,010 (2,227)	4400	C3 (0.0230%)
2,500 L	2,612 x 1,315 x 1,603 (103 x 52 x 63)	1,100 (2,425)	4400	C3 (0.0230%)
3,000 L	2,619 x 1,398 x 1,792 (103 x 55 x 71)	1,250 (2,756)	4400	C3 (0.0230%)

## MIXER CONFIGURATOR OPTIONS

Please use the configurator to design your specific mixing system. Contact our sales representatives and application specialists to assist you with the optimal DuoMixer® design for your process application.

EXAMPLE PRODUCT ID:

USMIX 50L A C J N P T W

Mixer	Working Volume	Acid/Base Pumps	Conductivity Measurement	Jacket	Printer	pH Measurement	Temperature Measurement	Weighing
MIX = Mixer	50 L 100 L 200 L 300 L 500 L 1,000 L 1,500 L 2,000 L 2,500 L 3,000 L	A = Acid / Base Pumps  (OPTIONAL)	C = Conductivity Sensor  (OPTIONAL)	J = Jacket  (OPTIONAL)	N = Printer  (OPTIONAL)	P = pH Sensor  (OPTIONAL)	T = Temperature Sensor  (OPTIONAL)	W = Weighing