

NewClassic MS

Analytical and Precision Balances



Robust Aluminum Housing

The robust housing made of high-quality aluminum protects the sensitive sensor from environmental influences and impacts. It is also resistant to chemicals. For guaranteed consistency and precision year after year – even with intensive use.



MonoBloc Inside

MonoBloc, the proven high-performance weighing cell developed by world leader in weighing technologies, METTLER TOLEDO, guarantees a long service life and extreme ruggedness.



User-friendly Operation

The HCD (High Contrast Display) with big numbers, clear symbols and an intuitive menu enables users to operate the balance quickly and easily. And with three freely programmable **SmartKeys**, routine tasks can be started at the touch of a button.



Easy Installation

The adjustable feet and clearly visible level indicator are now located at the front of the balance for easy leveling.



NewClassic Balances

Whether you are carrying out a simple routine task or a complicated weighing procedure, NewClassic balances offer a winning combination of strong performance and increased productivity thanks to the fast settling time and consistently reliable results. With the added advantage of proven MonoBloc weighing technology and FACT – fully automatic time- and temperature-controlled internal adjustment – the new generation of NewClassic balances provides visually attractive support for everyday weighing tasks.

Model Overview



Technical Data	MS104S	MS204S	MS304S
Maximum capacity	120 g	220 g	320 g
Readability	0.0001 g	0.0001 g	0.0001 g
Adjustment range with external weights	50-120 g	100-220 g	100-320 g
Repeatability (sd)	0.1 mg	0.1 mg	0.1 mg
Linearity	0.2 mg	0.2 mg	0.3 mg
Sensitivity temperature drift (10-30°C)	1.5 ppm/ °C	1.5 ppm/ °C	1.5 ppm/ °C
Stabilization time	2 s	2 s	3 s
IP Protection	IP54 in use	IP54 in use	IP54 in use
Usable height of draft shield	237 mm	237 mm	237 mm
Weighing pan dimensions	∅ 90 mm	∅ 90 mm	∅ 90 mm
Balance dimensions LxWxH	347x204x345 mm	347x204x345 mm	347x204x345 mm
Weight of balance	6.5 kg	6.5 kg	6.5 kg
Minimum weight (acc. to USP)	0.3 g	0.3 g	0.3 g
Minimum weight (acc. to 1%, k=2)	0.02 g	0.02 g	0.02 g
Power requirement	12 V / 0.84 A	12 V / 0.84 A	12 V / 0.84 A

Stability of sensitivity as from first installation with FACT automatic adjustment switched on



Technical Data	MS303S	MS403S	MS603S	MS1003S
Maximum capacity	320 g	420 g	620 g	1020 g
Readability	0.001 g	0.001 g	0.001 g	0.001 g
Adjustment range with external weights	100-320 g	100-420 g	100-620 g	500-1020 g
Repeatability (sd)	0.001 g	0.001 g	0.001 g	0.001 g
Linearity	0.002 g	0.002 g	0.002 g	0.002 g
Sensitivity temperature drift (10-30°C)*	3 ppm/ °C	3 ppm/ °C	3 ppm/ °C	3 ppm/ °C
Stabilization time	1.5 s	1.5 s	2 s	2 s
IP Protection	IP54 in use	IP54 in use	IP54 in use	IP54 in use
Usable height of draft shield	165 mm	165 mm	165 mm	165 mm
Weighing pan dimensions	127x127 mm	127x127 mm	127x127 mm	127x127 mm
Balance dimensions LxWxH	347x204x280 mm	347x204x280 mm	347x204x280 mm	347x204x280 mm
Weight of balance	6.2 kg	6.2 kg	6.2 kg	6.9 kg
Minimum weight (acc. to USP)	3 g	3 g	3 g	3 g
Minimum weight (acc. to 1%, k=2)	0.2 g	0.2 g	0.2 g	0.2 g
Power requirement	12 V / 0.84 A			



MS802S	MS1602S	MS3002S	MS4002S	MS6002S
820 g	1620 g	3200 g	4200 g	6200 g
0.01 g				
100-820 g	1000-1620 g	1000-3200 g	1000-4200 g	2000-6200 g
0.01 g				
0.02 g				
3 ppm/ °C				
1.5 s				
IP54 in use				
170x200 mm				
347x194x96 mm				
5.5 kg				
30 g				
2 g	2 g	2 g	2 g	2 g
12 V / 0.84 A				

* Sensitivity temperature drift for models without FACT: 10 ppm/ °C

Stability of sensitivity as from first installation with FACT automatic adjustment switched on

Model Overview



Technical Data	MS4002SDR	MS6002SDR
Maximum capacity	4200 g	6200 g
Maximum capacity, fine range	820 g	1220 g
Readability	0.1 g	0.1 g
Readability, fine range	0.01 g	0.01 g
Adjustment range with external weights	1000-4200 g	2000-6200 g
Repeatability (sd)	0.06 g	0.06 g
Repeatability (sd), fine range	0.01 g	0.01 g
Linearity	0.2 g	0.2 g
Linearity, fine range	0.02 g	0.02 g
Sensitivity temperature drift (10-30°C)	3 ppm/ °C	3 ppm/ °C
Stabilization time	1.5 s	1.5 s
IP Protection	IP54 in use	IP54 in use
Weighing pan dimensions	170x200 mm	170x200 mm
Balance dimensions LxWxH	347x194x96 mm	347x194x96 mm
Weight of balance	5.5 kg	5.5 kg
Minimum weight (acc. to USP)	30 g	30 g
Minimum weight (acc. to 1%, k=2)	2 g	2 g
Power requirement	12 V / 0.84 A	12 V / 0.84 A

Stability of sensitivity as from first installation with FACT automatic adjustment switched on



Technical Data	MS3001S	MS6001S	MS8001S
Maximum capacity	3200 g	6200 g	8200 g
Readability	0.1 g	0.1 g	0.1 g
Adjustment range with external weights	1000-3200 g	2000-6200 g	2000-8200 g
Repeatability (sd)	0.1 g	0.1 g	0.1 g
Linearity	0.2 g	0.2 g	0.2 g
Sensitivity temperature drift (10-30°C)*	5 ppm/ °C	5 ppm/ °C	5 ppm/ °C
Stabilization time	1 s	1 s	1 s
IP Protection	IP54 in use	IP54 in use	IP54 in use
Weighing pan dimensions	190x226 mm	190x226 mm	190x226 mm
Balance dimensions LxWxH	347x194x96 mm	347x194x96 mm	347x194x96 mm
Weight of balance	5.6 kg	5.6 kg	5.6 kg
Minimum weight (acc. to USP)	300 g	300 g	300 g
Minimum weight (acc. to 1%, k=2)	20 g	20 g	20 g
Power requirement	12 V / 0.84 A	12 V / 0.84 A	12 V / 0.84 A

* Sensitivity temperature drift for models without FACT: 15 ppm/ °C

Stability of sensitivity as from first installation with FACT automatic adjustment switched on

Features

 Metal Housing High-grade chemical-resistant die-cast aluminum housing	 FACT Fully automatic time- and temperature-controlled internal adjustment	 Diagnostics Easy running of balance diagnostics test e.g. keypad test, repeatability test
 MonoBloc Proven weighing technology for fast and accurate results	 SmartTrac Shows how much of the entire weighing range has been used	 Smart Key Programmable keys for shortcut access to preferred applications
 QuickLock Quick and comfortable dismantling of the draft shield (only 1 mg and 0.1 mg)	 Protection of main balance configurations against manipulation	 IP Protection IP54 in use
 Overload Protection Protects the weighing cell against excess weight overload	 Connectivity RS232 to connect to PC, printer or bar code reader; USB to connect to PC	 Protective Cover Encloses the entire housing, protecting the balances from stains and scratches
 LevelLock Fixable rear support feet for additional safety (only 0.01 g and 0.1 g)		

Model Overview



Technical Data	MS12001L	MS16001L	MS32001L
Maximum capacity	12200 g	16200 g	32200 g
Readability	0.1 g	0.1 g	0.1 g
Adjustment range with external weights	5000-12200 g	5000-16200 g	10000-32200 g
Repeatability (sd)	0.1 g	0.1 g	0.1 g
Linearity	0.2 g	0.2 g	0.3 g
Sensitivity temperature drift (10–30°C)*	5 ppm/ °C	5 ppm/ °C	5 ppm/ °C
Stabilization time	2 s	2 s	2 s
IP Protection	IP54 in use	IP54 in use	IP54 in use
Weighing pan dimensions	351x245 mm	351x245 mm	351x245 mm
Balance dimensions LxWxH	346x363x118 mm	346x363x118 mm	346x363x118 mm
Weight of balance	10.7 kg	10.7 kg	10.7 kg
Minimum weight (acc. to USP)	300 g	300 g	300 g
Minimum weight (acc. to 1%, k=2)	20 g	20 g	20 g
Power requirement	100–240 VAC/0.3A	100–240 VAC/0.3A	100–240 VAC/0.3A

* Sensitivity temperature drift for models without FACT: 15 ppm/ °C
Stability of sensitivity as from first installation with FACT automatic adjustment switched on



Technical Data	MS32000L	MS15KLIPE	MS24KLIPE
Maximum capacity	32200 g	15 kg	24 kg
Readability	1 g	2 g	2 g
Adjustment range with external weights	10000-32200 g	5-15 kg	10-24 kg
Repeatability (sd)	0.5 g	1 g	2 g
Linearity	1 g	2 g	2 g
Sensitivity temperature drift (10–30°C)**	5 ppm/ °C	–	–
Stabilization time	1.5 s	1 s	1 s
IP Protection	IP54 in use	IP65	IP65
Weighing pan dimensions	351x245 mm	351x245 mm	351x245 mm
Balance dimensions LxWxH	346x363x118 mm	346x363x122 mm	346x363x122 mm
Weight of balance	10.7 kg	9.9 kg	9.9 kg
Minimum weight (acc. to USP)	1500 g	3 kg	6 kg
Minimum weight (acc. to 1%, k=2)	100 g	200 g	400 g
Power requirement	100–240 VAC/0.3A	100–240 VAC/0.3A	100–240 VAC/0.3A

Stability of sensitivity as from first installation with FACT automatic adjustment switched on

Features

 Metal Housing High-grade chemical-resistant die-cast aluminum housing	 FACT Fully automatic time- and temperature-controlled internal adjustment	 Diagnostics Easy running of balance diagnostics test e.g. keypad test, repeatability test
 MonoBloc Proven weighing technology for fast and accurate results	 Overload Protection Protects the weighing cell against excess weight overload	 Smart Key Programmable keys for shortcut access to preferred applications
 Large weighing pan For comfortable weighing of bulky items	 Connectivity RS232 to connect to PC, printer or bar code reader; USB to connect to PC	 Protective Cover Encloses the entire housing, protecting the balances from stains and scratches

Approval

Approved versions of all models available

Applications

Piece Counting, Percent Weighing, Check Weighing, Dynamic Weighing, Statistics, Formulation, Totaling, Free Factor, Recall

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BAL-3709-LIT