

MA Precision Balances

Efficient and Simple



Simple Operation

The large, bright screen is easy to read, while on-screen instructions guide you through each weighing procedure. Calculations are performed automatically and it's simple to print out results or transfer them to a storage device.



Multiple Interfaces

Thanks to the USB-A and RS232 interfaces, you can transfer your weighing data quickly and without error to a printer or a computer or connect to a USB storage device for simple data transfer.



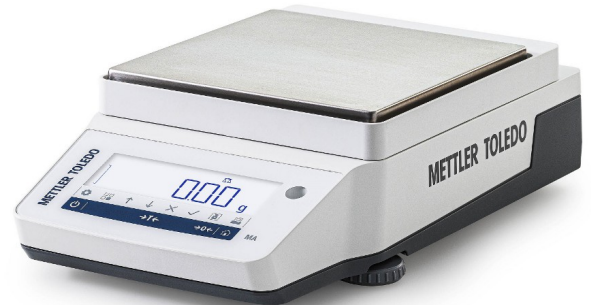
Trusted Performance

With proven weighing technologies and automatic adjustment using the internal test weights, you can trust your results to be consistent and precise.



Built to Last

Thanks to high-quality materials and solid construction, these balances are highly resilient. Even with intensive use in challenging weighing environments, you can depend on many years of reliable service.



Easy Everyday Weighing For Your Routine Tasks

You can rely on accurate results with these high-quality balances that are intuitive to operate and easy to clean. Built-in applications provide simple instructions, while automatic calculations and electronic data transfer minimize errors and make documentation easy.

The bright LCD screen provides excellent readability, while the glass surface resists wear and tear and is easy to clean. The touch keys make it simple to operate the balance and navigate through the menus in the user interface.

Technical Specifications



| | MA103 | MA203 | MA303 | MA503 |
|--|--------------------|--------------------|--------------------|--------------------|
| Limit values | | | | |
| Capacity | 120 g | 220 g | 320 g | 520 g |
| Readability | 1 mg | 1 mg | 1 mg | 1 mg |
| Repeatability (at 5% load) | 1 mg | 1 mg | 1 mg | 1 mg |
| Linearity deviation | 2 mg | 2 mg | 2 mg | 2 mg |
| Sensitivity offset (at nominal load) ▲ | 6 mg | 8 mg | 8 mg | 8 mg |
| Typical values | | | | |
| Repeatability (at 5% load) | 0.7 mg | 0.7 mg | 0.7 mg | 0.7 mg |
| Linearity deviation | 0.6 mg | 0.6 mg | 0.6 mg | 0.6 mg |
| Sensitivity offset (at nominal load) ▲ | 4 mg | 5 mg | 5 mg | 5 mg |
| Minimum weight (USP, tolerance = 0.10%) ▼ | 1.4 g | 1.4 g | 1.4 g | 1.4 g |
| Minimum weight (tolerance = 1%) ▼ | 140 mg | 140 mg | 140 mg | 140 mg |
| Settling time | 1.5 s | 1.5 s | 1.5 s | 1.5 s |
| Dimensions and other specifications | | | | |
| Balance dimensions (W × D × H) | 209 × 354 × 354 mm | 209 × 354 × 354 mm | 209 × 354 × 354 mm | 209 × 354 × 354 mm |
| Weighing pan dimensions (W × D) | – | – | – | – |
| Weighing pan diameter | 120 mm | 120 mm | 120 mm | 120 mm |

▲ after adjustment with internal weight

▼ determined at 5% load, k = 2

All models are available as approved versions. Models without internal test weights are also available (ExCal).



| | MA602 | MA1002 | MA2002 | MA3002 |
|--|--------------------|--------------------|--------------------|--------------------|
| Limit values | | | | |
| Capacity | 620 g | 1.2 kg | 2.2 kg | 3.2 kg |
| Readability | 10 mg | 10 mg | 10 mg | 10 mg |
| Repeatability (at 5% load) | 10 mg | 10 mg | 10 mg | 10 mg |
| Linearity deviation | 20 mg | 20 mg | 20 mg | 20 mg |
| Sensitivity offset (at nominal load) ▲ | 40 mg | 60 mg | 80 g | 80 g |
| Typical values | | | | |
| Repeatability (at 5% load) | 7 mg | 7 mg | 7 mg | 7 mg |
| Linearity deviation | 6 mg | 6 mg | 6 mg | 6 mg |
| Sensitivity offset (at nominal load) ▲ | 25 mg | 40 mg | 50 mg | 50 mg |
| Minimum weight (USP, tolerance = 0.10%) ▼ | 14 g | 14 g | 14 g | 14 g |
| Minimum weight (tolerance = 1%) ▼ | 1.4 g | 1.4 g | 1.4 g | 1.4 g |
| Settling time | 1 s | 1 s | 1 s | 1 s |
| Dimensions and other specifications | | | | |
| Balance dimensions (W × D × H) | 209 × 354 × 100 mm | 209 × 354 × 100 mm | 209 × 354 × 100 mm | 209 × 354 × 100 mm |
| Weighing pan dimensions (W × D) | 180 × 180 mm | 180 × 180 mm | 180 × 180 mm | 180 × 180 mm |
| Weighing pan diameter | – | – | – | – |

▲ after adjustment with internal weight

▼ determined at 5% load, k = 2

All models are available as approved versions. Models without internal test weights are also available (ExCal).



| | MA4002 | MA6002 | MA5001 |
|--|--------------------|--------------------|--------------------|
| Limit values | | | |
| Capacity | 4.2 kg | 6.2 kg | 5.2 kg |
| Readability | 10 mg | 10 mg | 100 mg |
| Repeatability (at 5% load) | 10 mg | 10 mg | 80 mg |
| Linearity deviation | 20 mg | 20 mg | 60 mg |
| Sensitivity offset (at nominal load) ▲ | 80 mg | 80 mg | 240 mg |
| Typical values | | | |
| Repeatability (at 5% load) | 7 mg | 7 mg | 50 mg |
| Linearity deviation | 6 mg | 6 mg | 20 mg |
| Sensitivity offset (at nominal load) ▲ | 50 mg | 50 mg | 150 mg |
| Minimum weight (USP, tolerance = 0.10%) ▼ | 14 g | 14 g | 100 g |
| Minimum weight (tolerance = 1%) ▼ | 1.4 g | 1.4 g | 10 g |
| Settling time | 1 s | 1 s | 1 s |
| Dimensions and other specifications | | | |
| Balance dimensions (W × D × H) | 209 × 354 × 100 mm | 209 × 354 × 100 mm | 209 × 354 × 100 mm |
| Weighing pan dimensions (W × D) | 180 × 180 mm | 180 × 180 mm | 180 × 180 mm |
| Weighing pan diameter | – | – | – |

▲ after adjustment with internal weight

▼ determined at 5% load, k = 2

All models are available as approved versions. Models without internal test weights are also available (ExCal).



| | MA12001L | MA16001L | MA32001L | MA32000L |
|--|--------------------|--------------------|--------------------|--------------------|
| Limit values | | | | |
| Capacity | 12.2 kg | 16.2 kg | 32.2 kg | 32.2 kg |
| Readability | 100 mg | 100 mg | 100 mg | 1 g |
| Repeatability (at 5% load) | 80 mg | 80 mg | 80 mg | 600 mg |
| Linearity deviation | 200 mg | 200 mg | 250 mg | 300 mg |
| Sensitivity offset (at nominal load) ▲ | 600 mg | 800 mg | 900 mg | 1 g |
| Typical values | | | | |
| Repeatability (at 5% load) | 40 mg | 40 mg | 40 mg | 400 mg |
| Linearity deviation | 60 mg | 60 mg | 80 mg | 100 mg |
| Sensitivity offset (at nominal load) ▲ | 400 mg | 500 mg | 550 mg | 650 mg |
| Minimum weight (USP, tolerance = 0.10%) ▼ | 82 g | 82 g | 82 g | 820 g |
| Minimum weight (tolerance = 1%) ▼ | 8.2 g | 8.2 g | 8.2 g | 82 g |
| Settling time | 1.5 s | 1.5 s | 1.5 s | 1.2 s |
| Dimensions and other specifications | | | | |
| Balance dimensions (W × D × H) | 354 × 380 × 126 mm | 354 × 380 × 126 mm | 354 × 380 × 126 mm | 354 × 380 × 126 mm |
| Weighing pan dimensions (W × D) | 352 × 246 mm | 352 × 246 mm | 352 × 246 mm | 352 × 246 mm |
| Weighing pan diameter | – | – | – | – |

▲ after adjustment with internal weight

▼ determined at 5% load, k = 2

All models are available as approved versions.

Features

Performance

- Electromagnetic Force Compensation (EMFC) weighing cell
- Internal adjustment

Efficient Operation

- LCD hybrid touchscreen
- 10 built-in applications
- Statistical data analysis
- Hook for weighing below the balance
- Plug & Play

Quality Assurance

- OIML/NTEP approved
- Front level indicator
- Sample ID

Data Management

- 2 interfaces: USB-A, RS232
- Bluetooth option
- Transfer weight function for easy data transfer
- MT-SICS
- EasyDirect Balance software

Sustainable Value

- Metal base, PBT top housing
- Overload protection
- Easy-to-clean QuickLock draft shield

Accessories

Enhance performance, improve ergonomics, and handle your data efficiently with our wide range of accessories, including EasyDirect Balance data management software, printers, weights, and density kit.

For further information on accessories, please visit our web page.

► www.mt.com/lab-accessories



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www.mt.com/MA-precision

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