

MX Precision Balances

Fast and Accurate



Fast and Accurate Weighing

The high-resolution load cell delivers accurate and reliable results with capacities up to 32 kg and readability as low as 1 mg. With SmartPan, the balance stabilizes quickly, even in turbulent environments, enabling fast and efficient weighing.



GxP-Compliant Documentation

Comply with GxP guidelines with automatic data logging and user management. Transfer data to printer or computer for complete and error-free documentation.



Guaranteed Valid Results

StatusLight provides information on the balance status, so you can easily see if the prerequisites for valid results have been fulfilled. The status is included in the logged data together with the weighing results.



Durable Construction

High-quality materials and robust IP54 construction ensure a long balance lifetime, providing an overall low cost of ownership.



Smart Features

For Advanced Requirements

The superior load cell, quality assurance functions, and multiple connectivity options combine to satisfy higher demands for accuracy, compliance, and efficiency. Easily integrated into your existing laboratory infrastructure, these balances have a multitude of smart features to make your weighing processes fast, convenient, and efficient.

Define your own routine testing schedule on the balance according to your internal quality requirements and process tolerances. Your balance will remind you when tests are due to be sure your results remain accurate in the intervals between calibrations.

When you don't need to use your balance, the configurable power-saving mode minimizes energy usage and saves costs.

Technical Specifications



| | MX303 | MX603 | MX1203 |
|--|--------------------|--------------------|--------------------|
| Limit values | | | |
| Capacity | 320 g | 620 g | 1.22 kg |
| Readability | 1 mg | 1 mg | 1 mg |
| Repeatability (at 5% load) | 0.9 mg | 0.9 mg | 0.9 mg |
| Linearity deviation | 2 mg | 2 mg | 2 mg |
| Sensitivity offset (at nominal load) ▲ | 6 mg | 6 mg | 7 mg |
| Typical values | | | |
| Repeatability (at 5% load) | 0.5 mg | 0.5 mg | 0.5 mg |
| Linearity deviation | 0.6 mg | 0.6 mg | 0.6 mg |
| Sensitivity offset (at nominal load) ▲ | 4 mg | 4 mg | 4 mg |
| Minimum weight (USP, tolerance = 0.10%) ▼ | 1 g | 1 g | 1 g |
| Minimum weight (tolerance = 1%) ▼ | 100 mg | 100 mg | 100 mg |
| Settling time | 1.5 s | 1.5 s | 1.5 s |
| Dimensions and other specifications | | | |
| Balance dimensions (W × D × H) | 222 × 379 × 353 mm | 222 × 379 × 353 mm | 222 × 379 × 353 mm |
| Weighing pan dimensions (W × D) | 127 × 127 mm | 127 × 127 mm | 127 × 127 mm |
| Weighing pan diameter | – | – | – |

▲ after adjustment with internal weight

▼ determined at 5% load, k = 2

All models are available as approved versions.



| | MX303N | MX603N | MX1203N |
|--|--------------------|--------------------|--------------------|
| Limit values | | | |
| Capacity | 320 g | 620 g | 1.22 kg |
| Readability | 1 mg | 1 mg | 1 mg |
| Repeatability (at 5% load) | 0.9 mg | 0.9 mg | 0.9 mg |
| Linearity deviation | 2 mg | 2 mg | 2 mg |
| Sensitivity offset (at nominal load) ▲ | 6 mg | 6 mg | 7 mg |
| Typical values | | | |
| Repeatability (at 5% load) | 0.5 mg | 0.5 mg | 0.5 mg |
| Linearity deviation | 0.6 mg | 0.6 mg | 0.6 mg |
| Sensitivity offset (at nominal load) ▲ | 4 mg | 4 mg | 4 mg |
| Minimum weight (USP, tolerance = 0.10%) ▼ | 1 g | 1 g | 1 g |
| Minimum weight (tolerance = 1%) ▼ | 100 mg | 100 mg | 100 mg |
| Settling time | 1.5 s | 1.5 s | 1.5 s |
| Dimensions and other specifications | | | |
| Balance dimensions (W × D × H) | 194 × 379 × 100 mm | 194 × 379 × 100 mm | 194 × 379 × 100 mm |
| Weighing pan dimensions (W × D) | 127 × 127 mm | 127 × 127 mm | 127 × 127 mm |
| Weighing pan diameter | – | – | – |

▲ after adjustment with internal weight

▼ determined at 5% load, k = 2

All models are available as approved versions.



| | MX2002 | MX4002 | MX6002 |
|--|--------------------|--------------------|--------------------|
| Limit values | | | |
| Capacity | 2.2 kg | 4.2 kg | 6.2 kg |
| Readability | 10 mg | 10 mg | 10 mg |
| Repeatability (at 5% load) | 8 mg | 8 mg | 8 mg |
| Linearity deviation | 20 mg | 20 mg | 20 mg |
| Sensitivity offset (at nominal load) ▲ | 80 mg | 80 mg | 80 mg |
| Typical values | | | |
| Repeatability (at 5% load) | 4 mg | 4 mg | 4 mg |
| Linearity deviation | 6 mg | 6 mg | 6 mg |
| Sensitivity offset (at nominal load) ▲ | 50 mg | 50 mg | 50 mg |
| Minimum weight (USP, tolerance = 0.10%) ▼ | 8.2 g | 8.2 g | 8.2 g |
| Minimum weight (tolerance = 1%) ▼ | 820 mg | 820 mg | 820 mg |
| Settling time | 1.2 s | 1.2 s | 1.2 s |
| Dimensions and other specifications | | | |
| Balance dimensions (W × D × H) | 194 × 379 × 103 mm | 194 × 379 × 103 mm | 194 × 379 × 103 mm |
| Weighing pan dimensions (W × D) | 170 × 203 mm | 170 × 203 mm | 170 × 203 mm |
| Weighing pan diameter | – | – | – |

▲ after adjustment with internal weight

▼ determined at 5% load, k = 2

All models are available as approved versions.



| | MX6002DR | MX12002 |
|--|--------------------|--------------------|
| Limit values | | |
| Capacity | 6.2 kg | 12.2 kg |
| Readability | 100 mg | 10 mg |
| Capacity of fine range | 1.2 kg | – |
| Readability in fine range | 10 mg | – |
| Repeatability (at 5% load) | 8 mg | 8 mg |
| Linearity deviation | 30 mg | 20 mg |
| Sensitivity offset (at nominal load) ▲ | 120 mg | 70 mg |
| Typical values | | |
| Repeatability (at 5% load) | 4 mg | 4 mg |
| Linearity deviation | 10 mg | 6 mg |
| Sensitivity offset (at nominal load) ▲ | 80 mg | 40 mg |
| Minimum weight (USP, tolerance = 0.10%) ▼ | 8.2 g | 8.2 g |
| Minimum weight (tolerance = 1%) ▼ | 820 mg | 820 mg |
| Settling time | 1.2 s | 1.2 s |
| Dimensions and other specifications | | |
| Balance dimensions (W × D × H) | 194 × 379 × 103 mm | 194 × 379 × 103 mm |
| Weighing pan dimensions (W × D) | 170 × 203 mm | 170 × 203 mm |
| Weighing pan diameter | – | – |

▲ after adjustment with internal weight

▼ determined at 5% load, k = 2

All models are available as approved versions.



| | MX6001 | MX8001 |
|--|--------------------|--------------------|
| Limit values | | |
| Capacity | 6.2 kg | 8.2 kg |
| Readability | 100 mg | 100 mg |
| Repeatability (at 5% load) | 50 mg | – |
| Linearity deviation | 60 mg | 100 mg |
| Sensitivity offset (at nominal load) ▲ | 240 mg | 6000 mg |
| Typical values | | |
| Repeatability (at 5% load) | 40 mg | – |
| Linearity deviation | 20 mg | 30 mg |
| Sensitivity offset (at nominal load) ▲ | 150 mg | 80 mg |
| Minimum weight (USP, tolerance = 0.10%) ▼ | 82 g | 82 g |
| Minimum weight (tolerance = 1%) ▼ | 8.2 g | 8.2 g |
| Settling time | 0.8 s | 1 s |
| Dimensions and other specifications | | |
| Balance dimensions (W × D × H) | 194 × 379 × 104 mm | 194 × 379 × 104 mm |
| Weighing pan dimensions (W × D) | 172 × 205 mm | 172 × 205 mm |
| Weighing pan diameter | – | – |

▲ after adjustment with internal weight

▼ determined at 5% load, k = 2

All models are available as approved versions.



| | MX12001L | MX16001L | MX32001L | MX32000L |
|--|--------------------|--------------------|--------------------|--------------------|
| Limit values | | | | |
| Capacity | 12.2 kg | 16.2 kg | 32.2 kg | 32.2 kg |
| Readability | 100 mg | 100 mg | 100 g | 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 | 600 mg | 800 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 | 400 mg | 500 mg | 600 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

- MonoBloc weighing cell
- SmartPan
- FACT automatic internal adjustment

Efficient Operation

- 7" touchscreen
- 9 built-in applications
- ErgoDoor
- Statistical data analysis

Quality Assurance

- OIML/NTEP approved
- User management
- Leveling assistant
- Configurable sample and task IDs
- Activity log
- StatusLight
- Configurable routine tests

Data Management

- 3 interfaces: USB-A, USB-C, Ethernet
- Bluetooth option
- Advanced reporting

- Drop-to-cursor
- MT-SICS
- EasyDirect Balance software

Sustainable Value

- Full metal housing
- IP54
- Overload protection
- Power-saving mode
- 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, density kit, and Bluetooth adapter.

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

► www.mt.com/lab-accessories



Mettler-Toledo GmbH
Im Langacher 44
8606 Greifensee, Switzerland
www.mt.com/contact

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Group Marketing

www.mt.com/MX-precision

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