

## MS Precision Balances

1 mg



### Quick and Easy Cleaning

Cleaning has never been so easy: the **QuickLock** draft shield can be dismantled in a few quick steps, without moving the balance, and the separate glass panels can be washed in the dishwasher.



### User-friendly Operation

The High Contrast Display (HCD) 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.



### Up-to-date Data Transfer

Quick and error-free data transfer: RS232 port for direct connection to PC, printer or bar code reader, USB port for connection to PC via standard USB cable.



### Easy Installation

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



### Strong Performers for Robust Reliability

Whether you are carrying out a simple routine task or a complicated weighing procedure, NewClassic precision balances offer a winning combination of strong performance and increased productivity thanks to the fast settling time and consistently reliable results.

With the proven MonoBloc weighing technology as well as fully automatic time- and temperature-controlled internal adjustment (FACT), MS analytical balances support your everyday weighing tasks.













# MS Precision Balances 1 mg



| Technical data                            | MS303S      | MS303SE*    | MS403S      | MS603S      | MS1003S     |
|---|-------------|-------------|-------------|-------------|-------------|
| <b>Limit values</b>                       |             |             |             |             |             |
| Maximum capacity                          | 320 g       | 320 g       | 420 g       | 620 g       | 1020 g      |
| Readability                               | 0.001 g     | 0.001 g     | 0.001 g     | 0.001 g     | 0.001 g     |
| Repeatability (at nominal load)           | 0.001 g     | 0.001 g     | 0.001 g     | 0.001 g     | 0.001 g     |
| Linearity deviation                       | 0.002 g     | 0.002 g     | 0.002 g     | 0.002 g     | 0.002 g     |
| Sensitivity temperature drift             | 3 ppm/°C    | 3 ppm/°C    | 3 ppm/°C    | 3 ppm/°C    | 3 ppm/°C    |
| <b>Typical values</b>                     |             |             |             |             |             |
| Repeatability (at nominal load)           | 0.7 mg      | 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      | 0.6 mg      |
| USP Minimum Weight <sup>1)</sup>          | 1.4 g       | 1.4 g       | 1.4 g       | 1.4 g       | 1.4 g       |
| Minimum weight (acc. to 1%, k=2, typical) | 0.14 g      | 0.14 g      | 0.14 g      | 0.14 g      | 0.14 g      |
| Settling time                             | 1.5 s       | 1.5 s       | 1.5 s       | 1.5 s       | 1.5 s       |
| Balance dimensions (W x D x H in mm)      | 204x347x283 | 204x347x283 | 204x347x283 | 204x347x283 | 204x347x283 |
| Weighing pan dimensions (mm)              | 127x127     | 127x127     | 127x127     | 127x127     | 127x127     |
| Usable height of draft shield (mm)        | 168         | 168         | 168         | 168         | 168         |
| Weight of balance                         | 5.5 kg      | 5.4 kg      | 5.5 kg      | 5.5 kg      | 5.5 kg      |

\* Adjustment with an external weight (without FACT); <sup>1)</sup> Typical minimum sample weight according to USP <41>; measurement at ≤ 5% load

## Features

|   |  |   |
|---|--|---|
|  <b>Metal housing</b><br>High-grade chemical-resistant die-cast aluminum housing           |  <b>FACT</b><br>Fully automatic time- and temperature-controlled internal adjustment              |  <b>Diagnostics</b><br>Easy execution of balance diagnostics e.g. keypad and repeatability tests         |
|  <b>MonoBloc</b><br>Proven weighing technology for fast and accurate results               |  <b>SmartTrac</b><br>Shows how much of the entire weighing range has been used                    |  <b>SmartKeys</b><br>Programmable keys for shortcut access to preferred applications                     |
|  <b>QuickLock</b><br>Quick and comfortable dismantling of the draft shield                |  <b>Protection</b> of main balance configurations against manipulation                           |  <b>Protective cover</b><br>Encloses the entire balance housing to protect against stains and scratches |
|  <b>Overload protection</b><br>Protects the weighing cell against excess weight overload |  <b>Connectivity</b><br>RS232 to connect to PC, printer or barcode reader; USB to connect to PC |  <b>Green MT</b><br>Just 1 Watt in standby, PVC and mercury free, energy efficient manufacture         |

## Approval

Approved versions of all models available

## Applications

Piece counting, percent weighing, check weighing, dynamic weighing, statistics, formulation, totaling, free factor, density, dosing, recall

## Accessories



**Fast, smart printers**  
 Archive quality printouts on paper, labels and continuous labels: P-58, P-56.



**Density kit**  
 For determining the density of solids and liquids.



**Weights and CarePacs®**  
 For routine testing and adjustment of balances, with guaranteed traceability.

**GWP®**  
 Good Weighing Practice™  
[www.mt.com/GWP](http://www.mt.com/GWP)



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