

NewClassic MS Semi-Micro Balances



Precise Results

The METTLER TOLEDO HRT (HiRes Technology) includes two built-in weights. Together with FACT (Fully Automatic Calibration Technology), this allows the balance to automatically perform adjustment and linearization.



Efficient Handling

Reduce the number of movements needed for every weighing. Open the draft shield ErgoDoor with one hand and simultaneously place the weighing sample with your other hand.



Space Saving

Save working space thanks to split draft shield doors that do not project beyond the balance, and sideways mounted connectors at the back of the balance.



Easy Cleaning

Cleaning has never been this easy: dismantle the QuickLock draft shield in a few short steps, then wash all glass panels and the drip tray in the dishwasher.



NewClassic MS Semi-Micro Balances

Whether you are carrying out a simple routine task or a complicated weighing procedure, NewClassic MS Semi-Micro balances offer a winning combination of strong performance and increased productivity thanks to a fast settling time and consistently reliable results. The Swiss high-precision weighing cell HRT guarantees constant accuracy over the entire weighing range. Clever ErgoDoors make the weighing-in of samples as easy and convenient as possible. The built-in date and time function enables GLP/GMP compliant print outs, ensuring full control and traceability for your research.

Semi-Micro Balances

Model overview



Limit values	MS105	MS105DU	MS205DU	MS204
Maximum capacity	120 g	120 g	220 g	220 g
Maximum capacity, fine range	–	42 g	82 g	–
Readability	0.01 mg	0.1 mg	0.1 mg	0.1 mg
Readability, fine range	–	0.01 mg	0.01 mg	–
Repeatability (at nominal load) ¹⁾	0.04 mg (100 g)	0.08 mg (100 g)	0.08 mg (200 g)	0.09 mg (200 g)
Repeatability (at low load) ¹⁾	0.02 mg (20g)	–	–	0.07 mg (20g)
Repeatability (fine range) ¹⁾	–	0.03 mg (40 g)	0.05 mg (80 g)	–
Repeatability (fine range at low load) ¹⁾	–	0.02 mg (20g)	0.02 mg (20g)	–
Linearity deviation	0.1 mg	0.15 mg	0.2 mg	0.2 mg
Sensitivity offset ²⁾	0.4 mg (100 g)	0.4 mg (100 g)	0.8 mg (200 g)	0.8 mg (200 g)
Weighing pan dimensions (mm)	Ø 80	Ø 80	Ø 80	Ø 80
Balance dimensions LxWxH (mm)	358x247x331	358x247x331	358x247x331	358x247x331
Typical values				
Repeatability (at nominal load) ¹⁾	0.03 mg (100 g)	0.06 mg (100 g)	0.07 mg (200 g)	0.07 mg (200 g)
Repeatability (at low load) ¹⁾	0.015 mg (20g)	0.015 mg (20g) ³⁾	0.015 mg (20g) ³⁾	0.05 mg (20g)
Minimum weight (according to USP)	45 mg	45 mg ³⁾	45 mg ³⁾	150 mg
Minimum weight (@ U=1%, 2 sd)	3 mg	3 mg ³⁾	3 mg ³⁾	10 mg
Settling time	8 s	4s / 8s	4s / 8s	2 s
Linearity deviation (within 10g)	0.02 mg	0.02 mg	0.02 mg	–
Sensitivity offset ²⁾	0.3 mg (100 g)	0.3 mg (100 g)	0.6 mg (200g)	0.6 mg (200 g)

¹⁾ Standard deviation (sd) ²⁾ Stability of sensitivity with FACT self-adjustment switched on ³⁾ at fine range

Features



HRT Weighing Cell

With two built-in weights, for constant accuracy over the entire weighing range



FACT

Fully automatic time- and temperature-controlled internal adjustment



Diagnostics

Easy running of balance diagnostics tests e.g. keypad test, repeatability test



ErgoDoor

The right door can be opened from the left side and vice versa



SmartTrac

Shows how much of the entire weighing range has been used



Smart Key

Programmable keys for shortcut access to preferred applications



QuickLock

Fast and convenient dismantling of the draft shield



Protection

of main balance configurations against manipulation



Protective Cover

Protects the balance from stains and scratches



ErgoSens

For touch-free operation of the balance



Connectivity

RS232 to connect to PC, printer or bar code reader; USB to connect to PC



OIML

Approved versions of all models available

Approval

Approved versions of all models available

Applications

Formulation, Piece Counting, Percent Weighing, Statistics, Totalling, Free Factor, Density, Recall

Accessories



RS-P25, RS-P26, RS-P28 Printer

The fastest way to generate and archive GLP/GMP compliant weighing data results.



Density Kit

For fast and secure density determination of liquids and solids.



ErgoSens

Optional, freely placeable, individually configurable – for touch-free operation of the balance from a distance.

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