

Issued by	NMi Certin B.V., designated and notified by the Netherlands to perform tasks with respect to conformity modules mentioned in article 9 of Directive 2009/23/EC, after having established that the measuring instrument meets the applicable requirements of Directive 2009/23/EC, to:
Manufacturer	Mettler-Toledo GmbH Im Langacher 8606 Greifensee Switzerland
Measuring instrument	A Non-automatic weighing instrument Type : XS..., XP..., XA..., XJ... or QD Depending on the configuration
Valid until	12 November 2023
Remarks	This revision replaces the earlier version(s), except for its documentation folder.

Further properties are described in the annexes
– Description T6361 revision 5;
– Documentation folder T6361-4.

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1 General information about the non-automatic weighing instrument

All properties of the non-automatic weighing instrument, whether mentioned or not, shall not be in conflict with the legislation.

1.1 Essential parts

The electronics;
 The mechanical assembly with load cell.

See block diagram;

Number	Pages	Description	Remarks
ME-11106995A	1	Prinzipschema	-

EMI protection measures:

- The A/D board is shielded with a metal cover;
- The electronic boards and the weighing cell are placed in a metal case;
- Ferrite around the flatcables between the main board and the housing of the weighing cell.

1.2 Essential characteristics

Accuracy class	Ⓢ
Maximum capacity	Max ≤ 520 g
Verification scale interval	e = 1mg
Weighing range(s)	Single interval Single range
Maximum number of scale intervals	n ≤ 520000 divisions
Actual scale interval	d ≤ e ≤ 10000 d
Temperature range	+10 °C / +30 °C
Power supply voltage	100 - 240 V AC 50/60 Hz
Application	Not intended to be used for direct sales to the public

1.3 Essential shapes

Number	Pages	Description	Remarks
ME-11505515	1	XS-Balances	-
ME-11505515A	1	XA-Balances	-
ME-11505618	1	XP-Balances	-
ME-11505767	1	QD Dosing Systems	-
11780583 / 3-4	1	Carrying handle, Electronics, Frontcover	-
11780583 / 3-5	1	Cantilever arm	-
ME-11505762	1	XS and XP Micro Balances	-
11781189 / 3-4	1	Control Unit	-
11781189 / 3-6	1	Housing Base Weighing Unit	-

The data plate is secured against removal by sealing or will be destroyed when removed.

Inside the cabinet is an adjustment lock, located on the main board.

1.4 Conditional parts

The non-automatic weighing instrument may be equipped with peripheral equipment which is used for the applications listed in article 1(2)(a) of Directive 2009/23/EC, provided that the peripheral equipment is certified to be connected to a non-automatic weighing instrument by a Notified Body responsible for type examination under Directive 2009/23/EC, or, that the equipment and the use of the equipment complies with the requirements of WELMEC 2.5 Issue 2, 2.2.

The non-automatic weighing instrument is fitted with a levelling device and a level indicator, unless the instrument is installed in a fixed position. A ring on the level indicator indicates when the maximum tilt is exceeded.

1.5 Non-essential parts

The non-automatic weighing instrument may be connected to non-essential devices, for example but not limited to bar code readers, foot switches, second display's and cash drawers, provided that:

- They do not present primary data used for purposes mentioned in article 1(2)(a) of Directive 2009/23/EC unless the "preliminary observations" in Annex 1 of this directive is satisfied;
- They do not lead to an instrument having other essential characteristics than those fixed by this type-approval document.

2 Information about the main constituent parts of the non-automatic weighing instrument

2.1 The electronics

2.1.1 Essential parts

Number	Pages	Description	Remarks
ME-11106912 11106912	1	Main board	Component layout Reference parts list
ME-11106960 SL-11106960	2	Main board high	Component layout Reference parts list
ME-11106924 SL-11106924	3	Transducer board	Component layout Reference parts list
ME-11106927 SL-11106927	2	Transducer board PP V.1	Component layout Reference parts list
ME-11106933 SL-11106933	1	Transducer board Micro	Component layout Reference parts list
ME-11122840 SL-11122840	1	Cell board XM / XU	Component layout Reference parts list
ME-11122802 SL-11122802	1	Cell Connboard Var.1	Component layout Reference parts list
ME-11100710 SL-11100710	1	Pos. Sensor board MX	Component layout Reference parts list
ME-11122807 SL-11122807	1	AWG Connboard Var.1	Component layout Reference parts list

2.1.2 Essential characteristics

List of legally relevant functions:

- Determination stability of equilibrium;
- Indication of stable equilibrium;
- Semi-automatic zero-setting;
- Initial zero-setting;
- Zero-tracking;
- Automatic or semi-automatic tare setting;
- Tare weighing;
- Preset tare;
- Automatic span adjustment (FACT) with internal calibration mass, operational when:
 - 0,5, 1, 1,5 and 2 hours after switch on and then with $\Delta t = 1,0$ °C;
 - On every 24 hours;
- Semi-automatic span adjustment with internal or external calibration mass;
- Acting upon significant faults;
- Checking the display;
- Underhook weighing;
- Weight unit selection (g, mg, μ g, custom units in the form of xxxx);
- Weight unit selection carat (ct) is possible. On the model an indelible marking "Not to be used for Direct Sales to the public" is added if this ability is possible;
- Weight unit selection troy ounce (oz tr) is possible only in those Member States where troy ounce was authorised on 21 April 1973. On the model an indelible marking "Not to be used for Direct Sales to the public" is added if this ability is possible;
- Indication whether the weight is outside the entered target weight with associated tolerances;
- Counting device;
- Percentage indication;
- Indications other than primary indications;
- Indication of additional information;
- Downloading coded non-metrological software as flash files;
- Formulation for adding different components;
- Statistics;
- Determination of the density.

2.1.3 Conditional parts

AC/DC adapter, Input 100-240 V AC, Output 12 V DC, I_{\max} 2 A, P_{\max} 24 W.

The non-automatic weighing instrument may be equipped with one or more of the following protective interfaces that have not to be secured:

- RS232;
- Single point Bluetooth (BTS);
- Aux1 and Aux2.

2.1.4 Non-essential parts

Display;
 Keyboard;
 Drive sensor board.

2.2 The mechanical assembly with load cell

2.2.1 Essential parts

Number	Pages	Description	Remarks
11780583 / 3-6	1	Weighing cell for XS, XP and QD Analytical Balances	-
11781189 / 3-8	1	Weighing cell for XS and XP Micro Balances	-

2.2.2 Essential characteristics

Characteristics of the available weighing cells for XS, XP and QD Analytical Balances:

- For instruments with $\text{Max} \leq 220 \text{ g}$, the maximum capacity of the weighing cell is 280 g;
- For instruments with $\text{Max} \leq 520 \text{ g}$, the maximum capacity of the weighing cell is 560 g.

Characteristics of the available weighing cell for XS and XP Micro Balances:

The maximum capacity of the weighing cell is 6,1 g with $e = 1 \text{ mg}$.

2.2.3 Essential shapes

See chapter 2.2.1.

3 Seals

To secure components that may not be dismantled or adjusted by the user, the non-automatic weighing instrument has to be secured in a suitable manner on the locations indicated in the drawings:

Number	Pages	Description	Remarks
ME-11505518	1	XS-Balances: Position of metrological markings stickers and securing sticker.	-
ME-11505627	1	XP & XS-Balances: Position of metrological markings stickers and securing sticker.	-

Number	Pages	Description	Remarks
ME-11505518A	1	XA & XS-Balances: Position of metrological markings stickers and securing sticker.	-
ME-11505758A	1	Standort Eichschilder XP..XS Mikrowaagen	-

4 Conditions for conformity assessment

The marks, facilities for the marks and the inscriptions on the non-automatic weighing instrument fulfill the requirements of article 1 of Annex IV of Directive 2009/23/EC.