Nederlands Meetinstituut

EC type-approval certificate

Number **T2936** revision 3
Project number 10127460

Issued by
NMi Certin B.V.
Hugo de Grootplein 1
3314 EG Dordrecht
The Netherlands

Notified Body Number 0122

In accordance with
The Council Directive 90/384/EEC on non-automatic weighing instruments.

Applicant
Mettler-Toledo GmbH
Im Langacher
8606 Greifensee
Switzerland

In respect of
A class (I), (II) or (III), electronic, single- or multi-interval, **non-automatic weighing instrument.**
Manufacturer : Mettler-Toledo
Type : PG-S, CG and GG

Characteristics

Class (I) Max ≤ 1010 g e ≥ 0.01 g e = d or e = 10 d n ≤ 101000 e Temperature limit: +17.5 °C / +22.5 °C	Class (I) Max ≤ 5050 ct e ≥ 0.05 ct e = d or e = 10 d n ≤ 101000 e Temperature limit: +17.5 °C / +22.5 °C
Class (II) Max ≤ 12100 g e ≥ 0.01 g e = d or e = 10 d n ≤ 81000 e Temperature limit: +5 °C / +40 °C	Class (II) Max ≤ 2550 ct e ≥ 0.1 ct e = d or e = 10 d n ≤ 25500 e Temperature limit: +5 °C / +40 °C
Class (III) Max ≤ 12100 g e ≥ 1 g n ≤ 10000 e for instruments with single interval n ≤ 10000 e for instruments with multi interval, per partial weighing range, with a maximum of three partial weighing ranges. Temperature limit: +5 °C / +40 °C	

In the description number T2936 revision 3 further characteristics are described.

Valid until
8 January 2007

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Description and documentation: The instrument is described in the description number T2936 revision 3 and documented in the documentation folder T2936-3, appertaining to this EC type-approval certificate.

Remarks: This revision replaces the earlier version, including its documentation folder.

Delft, 21 June 2001
NMi Certin B.V.

W.A.C.M. van Leeuwen
Manager Certification

1 General information about the non-automatic weighing instrument

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

1.1 Essential parts

See drawing Principle Schematic, drawing number SK-1461;
The electronics;
The mechanical assembly with weighing cell.

1.2 Essential characteristics

Power supply:
- 100 -240 V AC, 50/60 Hz;
- or 12V AC, 50/60 Hz.

1.3 Essential shapes

The non-automatic weighing instrument is built according to drawings:
- PG-S Balances with drawing numbers ME-240'637, ME-240'638 and ME-240692.

The data plate is secured against removal by sealing or will be destroyed when removed.
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: "Position of verification sticker and securing" with drawing numbers ME-240690 and ME-240698.
The securing component has to bear either:
- a mark of the manufacturer laid down in a notified body approved quality system (Annex II of the directive 90/384/EEC), or
- an official mark of a Member State of the EEC, or an other party to the EEA agreement.

Inside the cabinet is a calibration lock, located on the "Waagenprint" 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 the EC Directive (90/384/EEC), if the peripheral equipment is certified to be connected to an EC type-approved non-automatic weighing instrument by a Notified Body appointed to certify non-automatic weighing instruments according to paragraph I of Annex II of the EC directive on Non-Automatic Weighing Instruments.
A level indicator that shows that the maximum permissible tilt is being 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 and second display's, provided that:

- They do not present primary data used for purposes mentioned in article 1(2)(a) of the EC Directive (90/384/EEC) 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.

AC/AC-adapter.
Windscreen over the load receptor.

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

2.1 The electronics

2.1.1 Essential parts

Description	Drawing number	Rev.	Remarks
Waagenprint	ME-11101500	C	including 5 pages partslist

2.1.2 Essential characteristics

List of devices:
- determination stability of equilibrium;
- semi-automatic zero-setting;
- initial zero-setting;
- zero-tracking;
- semi-automatic subtractive tare weighing for models where $d \geq 0.1$ g;
- combined semi-automatic zero-setting and subtractive tare-balancing for models where $d < 0.1$ g;
- indication of unstable equilibrium;
- automatic span adjustment with internal calibration mass;
- semi-automatic span adjustment with internal calibration mass;
- semi-automatic span adjustment with external calibration mass (only for class (I) instruments);
- acting upon significant faults;
- checking the display;
- weighing unstable samples;
- changing from kg to lb, oz or ct (only for the countries where the use of lb is allowed);
- weight unit selection (g, mg, ct).

2.1.3 Conditional parts

The interface section is located on the main board. The non-automatic weighing instrument may be equipped with one or more of the following protective interfaces that have not to be secured:
- RS232;
- LC.

2.1.4 Non-essential parts

Display;
Keyboard.

2.2 The mechanical assembly with weighing cell

2.2.1 Essential parts

Description	Drawing number	Rev.	Remarks
Zellenprint	ME-225615	D	Partslist 2 pages
Abtastung	ME-225610	F	Partslist 1 page
TK-Fuehlerprint	ME-225621	A	Partslist 1 page
Abtastung BS-32	ME-21100003	D	Partslist 2 pages
Monoblock Measuringcell	ME-240681	A	Max 8100 g
Monoblock Measuringcell	ME-240682	--	Max 12100 g

2.2.2 Essential characteristics

Maximum capacity of the weighing cell:
- Max ≤ 8100 g with e ≥ 0.01 g (Drawing number ME-240681);
- Max ≤ 12100 g with e ≥ 1 g (Drawing number ME-240682).

3 Approval conditions

See chapter 1.3, essential shapes.

4 Seals and verification marks

See chapter 1.3, essential shapes.

5 CE-mark of conformity and inscriptions

The marks, facilities for the marks and the inscriptions on the non-automatic weighing instrument fulfils the requirements of article 1 of Annex IV.