

Nederlands Meetinstituut

EC type-approval certificate

Number **T6974** revision 0

Project number 602967

Page 1 of 5

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 A&D Instruments Ltd.
24 Blacklands Way
Abingdon Business Park
Abingdon, Oxfordshire
OX14 1DY United Kingdom

In respect of A class **(III)**, electronic **non-automatic weighing instrument**.
Manufacturer : A&D Instruments Ltd.
Type : FG...

Characteristics 30 kg ≤ Max ≤ 150 kg
e ≥ 10 g
n ≤ 3000 divisions

Temperature range -10 °C / +40 °C

In the description number T6974 revision 0 further characteristics are described.

Valid until 15 June 2016

Description and documentation The instrument is described in the description number T6974 revision 0 and documented in the documentation folder T6974-1, appertaining to this EC type-approval certificate.

Dordrecht, 15 June 2006
NMi Certin B.V.

Ing. C. Oosterman
Manager Product Certification

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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, may not be in conflict with the legislation.

1.1 Essential parts

The electronics;
The mechanical assembly with load cell.

EMC protection measures, see the drawings:

- Exploded View Base Unit (AL), drawing number 1-1-1;
- Exploded View Base Unit (AM), drawing number 1-2-1;
- Exploded View Base Unit (BM), drawing number 1-3-1;
- Exploded View Indicator Unit, drawing number 1-4-1.

1.2 Essential characteristics

Power supply:

- By external power supply adapter: 230 V AC, 50 Hz / 7 – 10 V DC; or
- By 4 x C sixe (R14P/LR14) dry batteries (6 V DC).

1.3 Essential shapes

The non-automatic weighing instrument is built according to the drawings:

- Names and functions, drawing number 3;
- Exploded View Base Unit (AL), drawing number 1-1-1;
- Exploded View Base Unit (AM), drawing number 1-2-1;
- Exploded View Base Unit (BM), drawing number 1-3-1;
- Exploded View Indicator Unit, drawing number 1-4-1.

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

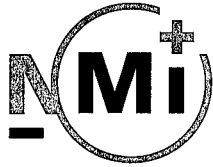
To secure components that may not be dismantled or adjusted by the user, the non-automatic weighing instrument has to be secured in a suitable manner on the locations indicated in the drawing:

- Sealing Diagram, drawing number FG-S-1.

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 another party to the EEA agreement.

Inside the cabinet is a calibration switch for calibration or gravity compensation, protected by a sealed cover.



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.

The non-automatic weighing instrument is fitted with a leveling device and a level indicator. The level indicator has a sensitivity of at least 2 mm for a tilt of 2/1000.

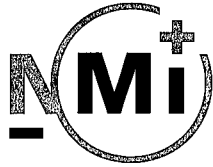
1.5 Non-essential parts

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 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.

Further non-essential parts:

- Comparator relais output;
- Internal battery;
- External power supply.



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
Parts Layout of PZ+4340	FG-MB-1	--	Layout
Parts List of PZ+4340	FG-PL-1/2	--	Parts list 2 pages

2.1.2 Essential characteristics

List of devices:

- Determination stability of equilibrium;
- Indication of stable equilibrium;
- Zero indicator;
- Initial zero-setting;
- Zero-tracking;
- Semi-automatic zero-setting and subtractive tare balancing that operates by the same key;
- Calibration / set-up and gravity compensation mode via a sealed switch;
- Checking the display;
- Digital printing;
- Counting mode;
- Comparator mode with upper and lower limits.

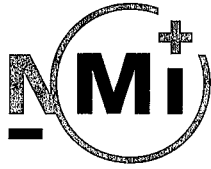
2.1.3 Conditional parts

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

- OP-23 (FG-23), RS232C serial interface;
- OP-24 (FG-24), RS232C serial interface and Comparator relay output.

2.1.4 Non-essential parts

Display;
Keyboard.



2.2 The mechanical assembly with load cell

2.2.1 Essential parts

Description	Drawing number	Rev.	Remarks
Specifications for the Load cell	FG-LC-1	--	

2.2.2 Essential characteristics

$$e \geq E_{\max}/5000;$$

2.2.3 Essential shapes

Description	Drawing number	Rev.	Remarks
Exploded View Base Unit (AL)	1-1-1	--	
Exploded View Base Unit (AM)	1-2-1	--	
Exploded View Base Unit (BM)	1-3-1	--	

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 fulfill the requirements of article 1 of Annex IV.