EU-type examination certificate
UK 2931 Revision 4

Issued by:

NMO
Notified Body Number 0126

In accordance with the requirements of the Council Directive 2014/31/EU, this EU-type examination certificate has been issued to:

Dini Argeo S.r.l.
Via della Fisica 20
41042 Spezzano di Fiorano
Modena
Italy

In respect of a family of Non-Automatic Weighing Instruments designated the 3590E, CPWE, DFW and DGT Series having the following characteristics:

n ≤ 10,000 for single-interval, multi-interval or multi-range, Class III
n ≤ 1,000 for single-interval, multi-interval or multi-range, Class IIII

The necessary data (principal characteristics, alterations, securing, functioning etc) for identification purposes and conditions (when applicable) are set out in the descriptive annex to this certificate.

This revision replaces previous versions of the certificate.

Issue Date: **12 May 2016**
Valid Until: **20 September 2022**
Reference No: **T1138/0015**

Grégory Glas
Technical Manager
For and on behalf of the Head of Certification Body

UKAS PRODUCT CERTIFICATION
0135

NMO I Stanton Avenue I Teddington I TW11 OJZ I United Kingdom
Tel +44 (0) 20 8943 7272 I Fax +44 (0) 20 8943 7270 I Web www.gov.uk/government/organisations/regulatory-delivery
NMO is part of the Regulatory Delivery directorate within the Department for Business, Innovation & Skills

Descriptive Annex

1 NAME AND TYPE OF INSTRUMENT

The designated certified weight indicators are designed to be connected to a load receptor to form a Class III and IIII, Non-Automatic Weighing Instrument. The instruments can either be mains or DC battery-powered, self indicating, Non Automatic Weighing Instruments.

The indicators consists of analogue to digital conversion circuitry, microprocessor control circuitry, power supply, keyboard, non-volatile memory for storage of calibration and setup data, and a weight display contained within a single enclosure.

The instrument may be used for direct sales to the public.

2 DESCRIPTION

2.1 Construction and devices

The digital weight indicators are fully described in Parts (Test) Certificate GB-1461.

2.2 Load cell

Any compatible load cell(s) may be used providing the following conditions are met:

- There is a respective OIML Certificate of Conformity (R60), or a test or parts certificate (EN: 45501) issued for the load cell by a Notified Body responsible for type examination under Directive 2014/31/EU.
- The certificate contains the load cell types and the necessary load cell data required for the manufacturer's declaration of compatibility of modules (WELMEC 2, 2015, No 10), and any particular installation requirements. A load cell marked NH is allowed only if humidity testing to EN45501 has been conducted on this load cell.
- The compatibility of the load cells and indicator is established by the manufacturer by means of the compatibility of modules calculation, contained in the above WELMEC 2 document, at the time of verification or declaration of EU conformity of type.
- The load cell transmission must conform to one of the examples shown in the WELMEC Guide 2.4, "Guide for Load cells".

2.3 Digital load cells

The 3590 or 3590E indicators may be connected through the serial line with up to 64 digital cells which may be of the following:

Manufacturer	Model	Test Certificate	Issued by
Flintec	RC3D	TC6586	NMi
HBM	C16i	D09-00.46	PTB
Scaime	CB50X-DL	TC7078	NMi
Dini Argeo	RCD	TC7547	NMi

When digital load cells are used the number of verification scale intervals is limited to the number specified in the applicable Test or Parts Certificate.

3 TECHNICAL DATA

3.1 Technical data for the indicator is provided in Parts (Test) Certificate GB-1461.

4 PERIPHERAL DEVICES AND INTERFACES

4.1 Interfaces

- 4 or 6 wire load cell connection
- DC voltage input
- RS-232
- RS-485
- Control inputs/outputs
- USB
- Ethernet
- Bluetooth
- RF (Radio frequency)
- WiFi

4.2 Peripheral devices

4.2.1 The following peripheral devices may be connected to the interfaces provided:

- Peripheral devices that have been issued with a Test or Parts Certificate by a Notified Body responsible for type approval under Directive 2014/31/EU; or
- Peripheral devices without a Test or Parts Certificate under the following conditions:
  - it bears the CE marking for conformity to the EMC Directive;
  - it is not capable of transmitting any data or instruction into the weighing instrument, other than to release a printout, checking for correct data transmission or validation;
  - it prints weighing results and other data as received from the weighing instrument without any modification or further processing;
  - it complies with the applicable requirements of EN:45501, i.e. 4.2, 4.4, 4.6 and 4.7.

A printing device may print additional information such as date or number to identify the printed weighing result(s) or sets of weighing results.

5 APPROVAL CONDITIONS

This certificate is issued subject to the following conditions:

5.1 Legends and inscriptions

5.1.1 The remote display bears the following legends on or near the display:

Max
Min
e =

5.1.2 The instrument shall bear the following legends:

Accuracy class
CE marking
Supplementary metrology marking
Serial number
Manufacturer's mark or name and postal address
Certificate number
T = - XX (where "XX" is the value, if T ≠ - Max)
[any other relevant markings, e.g. temperature]

The markings and inscriptions shall fulfil the requirements of Article 6, Article 16 and Point 1 of Annex III of Directive 2014/31/EU.

6 LOCATION OF SEALS AND VERIFICATION MARKS

6.1 The data plate is secured, either by sealing or by being of a form such that it is destroyed when removed.

6.2 Components that may not be dismantled or adjusted by the user must be secured. Common serial numbers, a wire and seal solution or a suitable mark may be used. The securing mark may be either:

- a mark of the manufacturer and/or manufacturer's representative, or
- an official mark of a verification officer.

6.3 Verification marks and CE-marking shall be grouped together.

6.4 When software sealing is used, the CONFIG and CAL counters' values shall be written on a tamper-evident label on or near the rating plate.

7 AUTHORISED ALTERNATIVES

7.1. Combined multi-platform weighing system

The following weighing system is assembled by using a series of approved digital platforms/load cells and weight repeaters connected to form a single weighing instrument. The indicator/display receives the weight information from the digital platforms/load cells via a hard-wired connection or by utilising RF transmission. The indicator/display can be used in a fixed position or it can be used as a portable device staying within the permitted RF range of up to 100 m (according to environment conditions).

The weighing system can be configured to use up to 32 digital platforms/load cells which are all connected to the digital indicator/display. The indicator/display receives the weight data from each digital platform/load cell, with the total weight value displayed on the primary digital indicator/display. If any of the other platforms within this weighing instrument has its own weight display then these must be disabled when used in this configuration.

When configuring/calibrating/verifying/using the instrument in this configuration the digital platforms/load cells are to be treated as a single load receptor with the load applied simultaneously to all platforms/load cells.

7.2 Alternative digital load cells

The indicators may be connected through the serial line to up to 64 digital cells which may be of the following:

Manufacturer	Model	Test Certificate	Issued by
Dini Argeo	RCPTD	TC8786	NMi
Utilcell / Dini Argeo	740D/ RCUD	E-04.02.C06	Departament de Treball I Industria

8 ILLUSTRATIONS

CERTIFICATE HISTORY

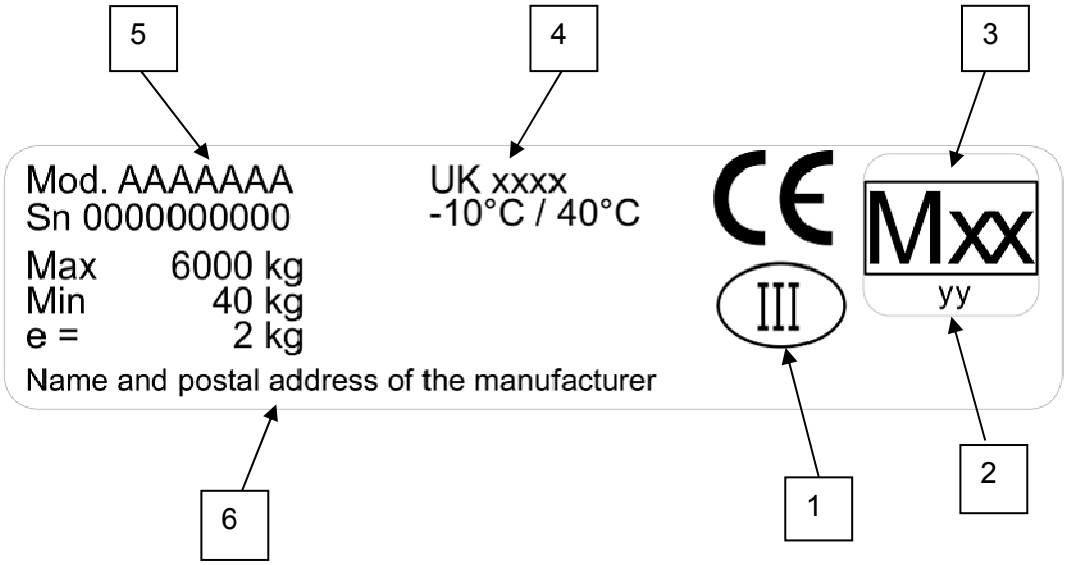
ISSUE NO.	DATE	DESCRIPTION
UK 2931	21 September 2012	Type approval first issued.
UK 2931 Revision 1	12 April 2013	Creation of section 2.3 Digital load cells. Table in section 1 removed. Figures 6 to 23 added.
UK 2931 Revision 2	01 November 2013	Creation of section 7.1 and amendments to section (Figures 6 to 23 removed, new Figures 6 & 7)
UK 2931 Revision 3	11 April 2016	Section 7.2 added.
UK 2931 Revision 4	12 May 2016	Section 5.1.2: Green M replaced by Supplementary metrology marking, postal address added. References to 2009/23/EC replaced by 2014/31/EU.

Figure 1 3590E family of indicators

Figure 2 CPWE family of indicators

Figure 3 DFW family of indicators

Figure 4 DGT family of indicators

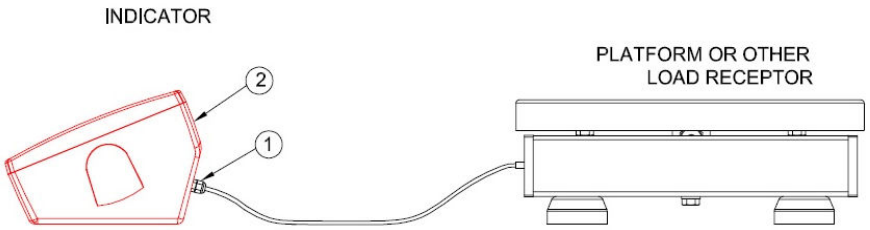


1. Accuracy class
2. Last 2 digits of the year of affixing CE mark
3. Number of notified body
4. TEC number
5. Indicator model
6. Name of the manufacturer and postal address

N.B.: the marks used are the type ultra destructive label.

Figure 5 Example of legal markings

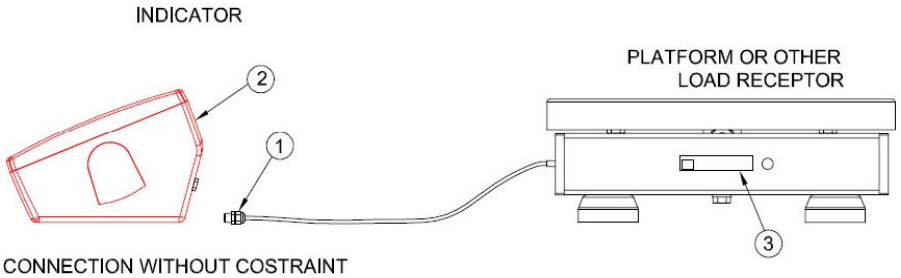
A) CONSTRAINED CONNECTIONS



(1) CONNECTION WITH COSTRAINT

(2) LEGISLATION LABEL AND PROTECTION SEAL ON THE INDICATOR

B) UNCOSTRAINED CONNECTION

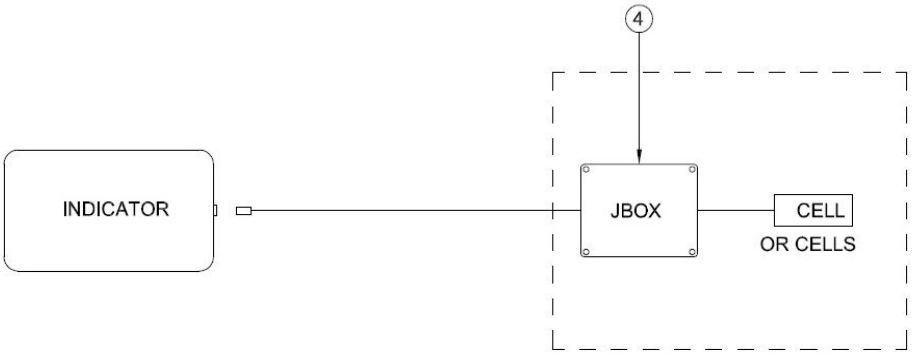


(1) CONNECTION WITHOUT COSTRAINT

(2) LEGISLATION LABEL AND PROTECTION SEAL ON THE INDICATOR

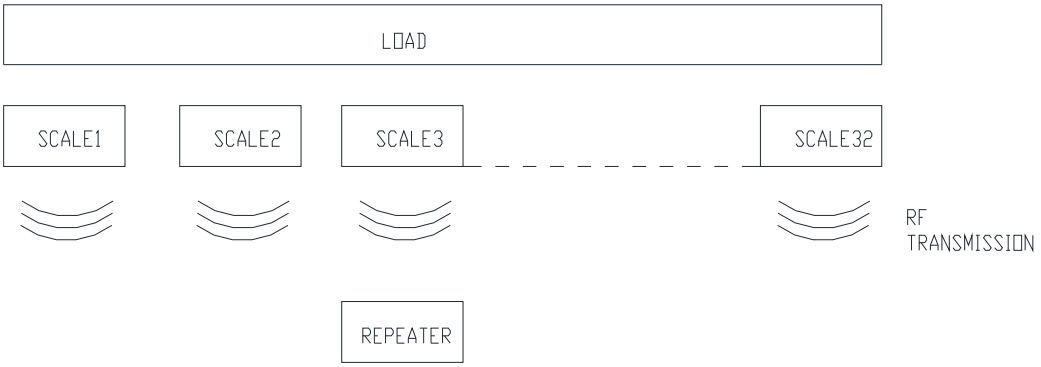
(3) LABEL WITH IDENTITYNG MARK IF THE LINKED INDICATOR

(4) EVENTUAL CONSTRAINED JUNCTION OR DISTRIBUTION BOX



WITHOUT JBOX THE LOAD CELL WILL BE COSTRAINED TO LOAD RECEPTOR

Figure 6 Examples of connections between indicators and load cells



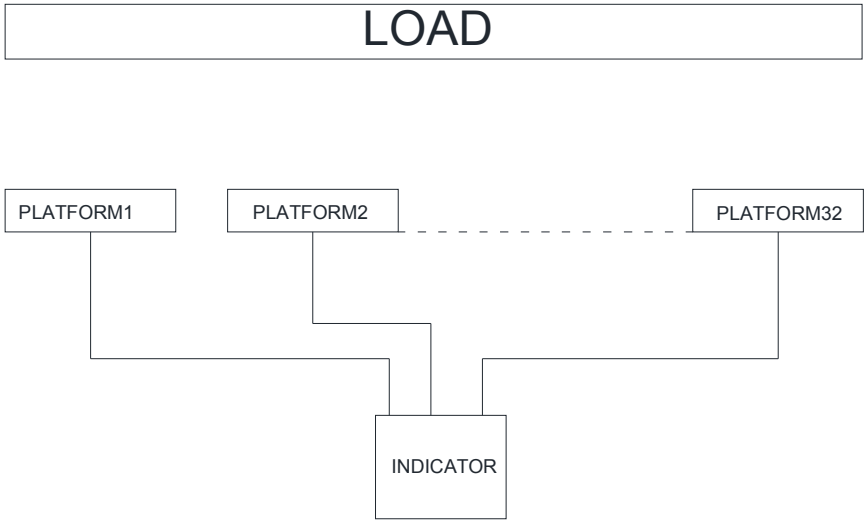


Figure 7 Examples of Combined multi-platform weighing system