EU-type examination certificate

Number **T12113** revision 4
Project number 3738063

Issued by

NMi Certin B.V.,
designated and notified by the Netherlands to perform tasks with respect to conformity procedures mentioned in Article 13 of Directive 2014/31/EU, after having established that the measuring instrument meets the applicable requirements of Directive 2014/31/EU, to:

Manufacturer

Rinstrum Europe GmbH
Hans-Böckler-Strasse 42
40764 Langenfeld
Germany

Measuring instrument

A **Non-automatic weighing instrument**

Type : LFT 200
LFT 100
LFT 1500
R4xx

Further properties are described in the annexes:
– Description T12113 revision 4;
– Documentation folder T12113-2.

Valid until

30 April 2031

Initially issued

30 April 2021

Remark

This revision replaces the earlier versions, including for its documentation folder.

Issuing Authority

NMi Certin B.V., Notified Body number 0122
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Certification Board

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PRODUCTS RvA C 681

Description

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.
This certificate contains references to other certificates. The properties mentioned in these certificates shall be observed in addition to the properties mentioned in this certificate.

1.1 Essential parts

See block diagram:

Number	Pages	Description	Remarks
12113/0-01	1	Hardware block diagram	-
12113/4-01	1	R4xx On Board Double Shear Beam	-

Indicator:

Producer	Type	Certificate number	Remarks
VPG Systems UK Ltd.	PM1800	TC7193	Including tilt sensor
Rinstrum	R4xx	TC6821	Including tilt sensor

Analog load cells:

Producer	Type	Certificate number	Remarks
Revere Transducers	5103	TC5037	-
P M Onboard Ltd	235105	D09-06.47	-
Zemic	HM9C	D09-06.46	-
Flintec	SB4	D09-97.02	-

1.2 Essential characteristics

Accuracy class	(III) or (IIII)
Maximum capacity	Calculated using the compatibility of modules form, contained in EN 45501:2015 clause F.4
Verification scale interval	Calculated using the compatibility of modules form, contained in EN 45501:2015 clause F.4
Weighing ranges	Single interval Multi-interval Multiple range

Maximum number of scale intervals (one weighing range)	n ≤ 2000
Maximum number of scale intervals (multi-interval)	n ≤ 2000 (per partial weighing range)
Maximum number of scale intervals (multiple range)	n ≤ 2000 (per weighing range)
Maximum number of (partial) weighing ranges	2
Maximum inclination	26,8% or 15°
Temperature range	-10°C / +40°C
Power supply voltage	6,5 – 24 V DC or 200 – 250 V AC
Application	Intended to be used for onboard weighing on a truck

1.3 Essential shapes

Number	Pages	Description	Remarks
12113/0-02	1	Load cell assembly drawing	-
12113/4-02	1	R4xx On Board Double Shear Beam Load	-
12113/4-03	1	System Layout weighing frame	-

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

1.4 Conditional parts

The instrument may be equipped with the following parts that further process the measurement result without modification under the conditions stated in the table:

Part	Conditions	Reference document
Simple recipient printer	CE marking present	WELMEC 2.10 clause 3.1.3
Printer Data Storage Device	CE marking present and the part is certified to be connected to a weighing instrument by a Notified Body responsible for type examination under Directive 2014/31/EU.	WELMEC 2.10 clause 3.1.3

The non-automatic weighing instrument is fitted with an inclination sensor, the characteristics are described in the certificate of the indicator (see 1.1). When maximum inclination is exceeded an error message is displayed and weighing is inhibited.

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 displays and cash drawers, provided that:
- They do not present primary data used for purposes mentioned in Directive 2014/31/EU Article 1(2), (a) to (f) unless the (Preliminary observation) in Directive 2014/31/EU Annex I is satisfied;
- They do not lead to an instrument having other essential characteristics than those fixed by this certificate.

2 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 certificates involved.

The connecting cable of the load cell or the junction box is provided with possibility to seal.

The connecting cable of the inclination sensor is secured by sealing or the serial number of the inclination sensor is marked on the data plate of the non-automatic weighing instrument.

The sealing will be destroyed when removed.

3 Conditions for conformity assessment

The marks, facilities for the marks and the inscriptions on the non-automatic weighing instrument fulfil the requirements of point 1 of Annex III of Directive 2014/31/EU.

The compatibility of load cells and indicator is established by the manufacturer by means of the compatibility of modules form, contained in EN 45501:2015 clause F.4, at the time of putting into use.

The inscriptions contain the value of the event counter at the time of conformity assessment.

For weighing instruments weighing liquids a separate control instrument shall be provided which shall enable the checking of weighing performance to an accuracy greater than either:
- 1/3 of MPE if the control instrument is verified immediately prior to the test;
- 1/5 of MPE in all other cases.

A tilt test must be a part of conformity assessment and needs to be conducted as follows:
- Apply the test load in a levelled position. Tilt the device to maximum inclination in all four directions and check for MPE;
- The tilt test may be performed with a smaller load instead of maximum load under the condition that the MPE for the smaller load is corrected linearly for the MPE at maximum load;
- Example:
  - If a test load of 0,40*Max is used, the MPE is 0,4*MPE_{max};
  - If a test load of 0,75*Max is used, the MPE is 0,75*MPE_{max}.