Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

REPORT

NO 1.12-4061179

on the

Type Examination of a

Non-Automatic Weighing Instrument

Type: BIS03A

Manufacturer: seca gmbh & co. kg.
Hammer Steindamm 9-25
22089 Hamburg
Germany

The type was tested under the following requirements:

R 76-1, edition 2006 *)

This report belongs to the OIML Certificate N° R76/2006-DE1-13.02 and includes 6 pages.

**) This includes the requirements of the European Directive 2009/23/EC.*

CONTENTS

page

Summary of the examination

Subject of the type examination was the non-automatic electromechanical weighing instrument of type BIS03A with the following specifications:

type designation:	BIS03A
maximum capacity:	15 kg
verification scale interval	10 g
number of verification scale intervals	1500 (accuracy class (III))
power supply	9 V DC

In addition to the examination of the documents, tests were performed on one weighing instrument, type BIS03A (see test report No 1.12-4061179/1).

The type is constructed for electronic weighing of babies and infants in particular at medical applications.
All metrological tests have been performed by the manufacturer on a complete instrument. These results have been accepted, because the manufacturer disposes of a certified quality management system according to ISO 9001 (TÜV SÜD Management Service GmbH, Certificate No.: 1210030261 TMS, dated 2011-07-07), and an approved and regularly supervised quality system for the production process (Certificate of EC-notfied body No. 0109, Eichdirektion Hessen, Germany), and the test laboratory meets the demands of ISO/IEC 17025 and the relevant OIML Recommendation R76-1 which is ensured by regular inspection of PTB (last inspection date: 2011-11-02). The checklist has been performed by PTB.

Result

On the basis of the performance tests and the examination of the instrument mentioned above and the documentation, the weighing instrument is permitted to comprise the functions, devices and characteristic features stated in the “general information concerning the pattern“; they fully meet the requirements of R 76-1 (and thus the requirements of the European Directive 2009/23/EC).

Date of report: 27.05.2013

Signature: _____

GENERAL INFORMATION CONCERNING THE PATTERN

1 DESIGNATION AND TYPE OF CONSTRUCTION OF MEASURING INSTRUMENT

Non-automatic electromechanical weighing instrument without lever system, type BIS03A, see figure 1.

2 DESCRIPTION OF TYPE

2.1 Mechanical set-up

Tray-shaped plastic load receptor (weighing surface) screwed to an aluminum plate with a strain gauge load cell at each of its four corners. The electronics for the display and for operation are attached to the tray-shaped load receptor. The battery compartment takes 6 AA-type batteries and has a low-voltage socket for the required power supply.

2.2 Electrical functions

The signals from the strain gauge load cells are passed sequentially to an AD converter. The weighing results are formed in full in the weighing module and shown in the LC display once they have been appropriately formatted.

2.3 Permissible functions and devices (reference to R76-1 in brackets)

- Initial zero-setting device (≤ 20 % of Max) (T.2.7.2.4)
- Zero-tracking device (4% of Max) (T.2.7.3)
- Semi-automatic subtractive tare balancing device (T.2.7.4.1)
- Display segment test after switch-on (5.3.1)
- Automatic display switch off after 60 sec. (not executable with mains powered instruments)
- Device for displaying the “calibration counter” (see 7)

3 TECHNICAL DATA

3.1 Weighing instruments

Table 1

Type	BIS03A
Accuracy class	(III)
Min	0.2 kg
Max	15 kg
e=d	0.01 kg
n	1500
Tare balancing range, subtractive	10 kg
Temperature range	10 °C ... 40 °C

3.2 Data of strain gauge load cells

Table 2

Manufacturer	Type	Nominal load	Accuracy class	Scale interval
Flintec	PB-7.5-C3	7.5 kg	C3	3000

- This load cell complies with OIML-R60/2000 (OIML certificate No. R60/2000-DE1-10.01).

3.3 Documents

The documents appendant to this certificate are deposited at the notified body in the set of certification documentation No. ZDS- R76/2006-DE1-13.02. The index of the set of certification documentation has been stamped by the notified body and it has been sent to the owner of the certificate.

4 INTERFACES, AUXILIARY DEVICES

4.1 Interface on the instrument

- Serial SeSAM bus or ISIS bus interface for adjustment purposes with special protocol and CRC checksum (adjustment is secured by “calibration counter”, see 7).
- UART interface for wireless transmission (SMF) of weight values which are not subject to legal control (these values have to be identified on a printout accordingly).

4.2 Devices that may be connected

None

5 APPROVAL CONDITIONS AND INSCRIPTIONS

The weighing instrument has to be designed according to chapter 1.

6 ADDITIONAL INFORMATION FOR VERIFICATION

- The following software version is approved:

Software	Software version	Software identification
CHS-Software	01.yy [1)]	CE5C

[1)] The wildcard “y” is for modification of software not subject legal metrological control.

The software version and identification can be checked as follows:

1. Press and hold any button (tare or hold) and start the scale with the start button.
2. The display will briefly show the segments, then the content of the calibration counter (i.e. the number of calibrations performed so far) flashes for 24 seconds.
3. During calibration counter display, again press and hold one of the buttons for more than 1.5 seconds (tare or hold).
4. After the calibration counter, the software identification and then the checksum are displayed for six seconds each.
5. To display the software identification and the checksum again, please switch off the scale and proceed once more from step 1.

7 LOCATIONS FOR SECURING MARKS

Seals

Seals have to be applied to the underside of the instrument at the following points:

- one seal on each of the screwed connections top right and bottom left.

“Calibration counter”

The weighing instrument parameters (adjustment of the weighing instrument) can be changed in the adjustment mode. With every adjustment, a “calibration counter” is automatically increased by one. The “calibration counter” status can be shown in the display and can be compared with the reading on the calibration counter seal. If both numbers match the adjustment parameters have not been changed. The “calibration counter” status can be displayed if, with the scale switched off, one of the keys on the operating unit is kept pressed and the scale is switched on with the Start key.

8 DESCRIPTIVE PLATE

The descriptive plate is located at the side of the weighing instrument.

Figure 1: BIS03A