Australian Government
National Measurement Institute
Bradfield Road, West Lindfield NSW 2070

Certificate of Approval

NMI 6/4D/332

Issued by the Chief Metrologist under Regulation 60
of the
National Measurement Regulations 1999

This is to certify that an approval for use for trade has been granted in respect of the instruments herein described.

Dibal Model K-265X Weighing Instrument

submitted by Accuweigh Pty Ltd
3 Kurrara Street
Lansvale NSW 2166

NOTE: This Certificate relates to the suitability of the pattern of the instrument for use for trade only in respect of its metrological characteristics. This Certificate does not constitute or imply any guarantee of compliance by the manufacturer or any other person with any requirements regarding safety.

This approval has been granted with reference to document NMI R 76, *Non-automatic weighing instruments, Parts 1 and 2*, dated July 2004.

This approval becomes subject to review on **1/12/17**, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variants 1 to 4 approved – interim certificate issued	23/11/06
1	Pattern & variants 1 to 4 approved – interim certificate issued	2/03/06
2	Variant 5 approved – certificate issued	24/02/09
3	Pattern & variants 1 to 5 reviewed & updated – certificate issued	30/07/13

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 6/4D/332' and only by persons authorised by the submittor.

It is the submittor's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the National Measurement Institute (NMI) and with the relevant Certificate of Approval and Technical Schedule. Failure to comply with this Condition may attract penalties under Section 19B of the National Measurement Act and may result in cancellation or withdrawal of the approval, in accordance with document NMI P 106.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificates No S1/0/A or No S1/0B.

Special Condition of Approval:

Certain aspects of this instrument (in particular label and ticket formats) are able to be configured by the user. Whilst NMI believes that acceptable label and ticket formats can be achieved for typical basic sales modes, it is also possible for the instrument to be configured to produce unacceptable formats, and use of some formats may be inappropriate for different sales modes. It is the responsibility of the user to ensure that acceptable and appropriate formats are used in any particular situation.

Signed by a person authorised by the Chief Metrologist to exercise their powers under Regulation 60 of the *National Measurement Regulations 1999*.

Mr C Davies

TECHNICAL SCHEDULE No 6/4D/332

1. Description of Pattern approved on 23/11/06

A Dibal model K-265X class (III) non-automatic multiple range self-indicating price-computing weighing instrument (Figure 1) which has a verification scale interval of 0.005 kg for the low range which has a maximum capacity of 15 kg, and has a verification scale interval of 0.01 kg for the high range which has a maximum capacity of 30 kg.

Instruments are configured so that the weighing range changes automatically with increasing load and when the indication remains at rest at zero.

An indication illuminates to indicate the range in which the instrument is currently operating.

The instrument has the keyboard and displays integrated into the instrument body ('Flat' version). Each display is a liquid crystal (LCD) type, on which weight, unit price and price information, together with alphanumeric information relating to product look up (PLU) items, is displayed. In addition when a tare or pre-set tare is operational a display of the tare value is provided.

Instruments are fitted with an integral thermal label/ticket printer (#).

Instruments have unit price to $999.99/kg, price to $9999.99, a product look up (PLU) facility and associated keyboard, and may be fitted with output sockets (output interfacing capability) for the connection of peripheral and/or auxiliary devices.

The instrument operates from mains AC power.

(#) Refer to the Special Condition of Approval.

1.1 Zero

Instruments have a zero light which illuminates whenever zero is correct within ±0.25*e* (*e* of the weighing range in use).

Instruments have a semi-automatic zero-setting device to set the instrument to within ±0.25*e* of zero (*e* of the weighing range in use), with a nominal range of not more than 4% of the maximum capacity of the instrument (Max_2).

Zero may be automatically corrected to within ±0.25*e* (*e* of the weighing range in use) whenever the instrument comes to rest within 0.5*e* (*e* of the weighing range in use) of zero or whenever power is applied.

Instruments also have an initial zero-setting device with a nominal range of not more than 20% of the maximum capacity of the instrument (Max_2).

1.2 Tare

A semi-automatic subtractive tare device of up to 14.995 kg capacity may be fitted.

In addition, a keyboard-entered pre-set subtractive tare device may be fitted, it has a capacity of up to 9.995 kg.

A separate display of the tare value is provided whenever a tare is active.

Pre-set tare values may be stored and recalled, and may be associated with product or item look-up tables.

Any tare value set whilst the instrument is in the lower range will also be active in the higher range (rounded to the verification scale interval of the high range). Any tare value set whilst the instrument is in the higher range will be cancelled when the indicator is switched to the lower weighing range.

1.3 Levelling

The instrument is provided with adjustable feet and adjacent to the level indicator is a notice advising that the instrument must be level when in use.

1.4 Networking

The pattern may be connected in a network with other compatible approved K series instruments and/or with a computer, to share common PLU data, and to accumulate and retrieve management information.

Note: The weighing and price-computing functions of each weighing instrument in the network are independent, and the removal, repair or replacement of a particular weighing instrument does not necessitate reverification of any other weighing instrument in the network.

1.5 Interfaces

Instruments may be fitted with interfaces for the connection of auxiliary and/or peripheral devices. Any interfaces shall comply with clause 5.3.6 of document NMI R76 (the basic intent of which is that it shall not be possible to alter weighing results via the interfaces).

Any measurement data output from the instrument or its interfaces shall only be used for trade in compliance with Supplementary Certificate No S1/0/A (in particular in regard to the data and its format).

The pattern may be fitted with RS232/422 and/or ethernet serial data interfaces.

1.6 Descriptive Markings

Instruments carry the following markings:

Manufacturer's mark, or name written in full	Dibal, Spain
Name or mark of manufacturer's agent	……..
Indication of accuracy class	(III)
Pattern approval mark for the instrument	NMI 6/4D/332
Maximum capacity	*Max* ..... kg #1
Minimum capacity	*Min* ..... kg #1
Verification scale interval	*e* = ... kg #1
Tare capacity	*T* = - ..... kg #2
Serial number of the instrument	……..

#1 These markings are required for each weighing range (e.g. 'W1', 'W2') and are also shown near the display of the result if they are not already located there.

#2 This marking is required if *T* is not equal to *Max* (the value to be marked is the larger of the maximum tare capacity or the maximum preset-tare capacity.)

1.7 Display Check

A display check is initiated whenever power is applied.

1.8 Verification Provision

Provision is made for the application of a verification mark.

1.9 Sealing Provision

Provision is made for the calibration adjustments to be sealed by means of a destructible adhesive label used to prevent removal of the casing screw that provides access to the calibration button (Figure 2).

2. Description of Variant 1 approved on 23/11/06

Certain other models of the K series as listed below:

(i) Model K-235X which is the same as the pattern, model K-265X, except that it does not have networking capability and only has an RS232 interface.

(ii) Model K-240X which is the same as the pattern, except that it does not have any interfaces and only has a ticket printer.

(iii) Model K-250X which is the same as the pattern, except that it supports a differing number of PLU items and only has an RS232/422 interface and only has a ticket printer.

(iv) Model K-255 which is the same as the pattern, except that it supports a differing number of PLU items and only has an RS232/422 interface.

3. Description of Variant 2 approved on 23/11/06

Any model of the pattern and variant 1 in certain versions as listed below:

(i) Similar to the pattern except that the customer display is mounted on a column ('Tower' version) (Figure 3). This may be indicated by a suffix 'T' to the model designation (e.g. K-235X T).

(ii) Similar to the pattern except that the operator and customer displays, the keyboards, and the ticket printer are mounted on a column (Figure 4). This may be indicated by a suffix 'DB' to the model designation (e.g. K-240X DB).

Provision is made for the calibration adjustments to be sealed as shown in Figure 5.

(iii) As a freely-suspended instrument as shown in Figure 6. This may be indicated by a suffix 'HA' to the model designation (e.g. K-255 HA), where the instrument housing is plastic (ABS). The models K-240X and K-250X are also available as freely-suspended instruments with a stainless steel housing, in which case this may be indicated by a suffix 'HS' to the model designation (e.g. K-250X HS).

Provision is made for the calibration adjustments to be sealed as shown in Figure 7.

4. Description of Variant 3 approved on 23/11/06

The pattern or variants 1 and 2 as multiple range instruments of certain other capacities as listed below:

- with a verification scale interval of 0.002 kg for the low range which has a maximum capacity of 6 kg, and has a verification scale interval of 0.005 kg for the high range which has a maximum capacity of 15 kg.

  The maximum semi-automatic subtractive tare capacity is 5.998 kg.

  The maximum pre-set tare capacity is 5.998 kg.

- with a verification scale interval of 0.001 kg for the low range which has a maximum capacity of 3 kg, and has a verification scale interval of 0.002 kg for the high range which has a maximum capacity of 6 kg.

  The maximum semi-automatic subtractive tare capacity is 2.999 kg.

  The maximum pre-set tare capacity is 2.999 kg.

5. Description of Variant 4 approved on 23/11/06

The pattern or variants 1 and 2 as single interval instruments of certain capacities as listed below:

- of 6 kg maximum capacity with a verification scale interval of 0.002 kg.

  The maximum semi-automatic subtractive tare capacity is 6 kg.

  The maximum pre-set tare capacity is 6 kg.

- of 15 kg maximum capacity with a verification scale interval of 0.005 kg.

  The maximum semi-automatic subtractive tare capacity is 15 kg.

  The maximum pre-set tare capacity is 15 kg.

- of 30 kg maximum capacity with a verification scale interval of 0.01 kg.

  The maximum semi-automatic subtractive tare capacity is 30 kg.

  The maximum pre-set tare capacity is 30 kg

6. Description of Variant 5 approved on 24/02/09

The models K-335, K-340, K-350, K-355 and K-360 which are similar to the pattern but with enhanced PLU (product look up) program software.

TEST PROCEDURE No 6/4D/332

Instruments shall be tested in accordance with any relevant tests specified in the National Instrument Test Procedures.

The instrument shall not be adjusted to anything other than as close as practical to zero error, even when these values are within the maximum permissible errors.

Maximum Permissible Errors

The maximum permissible errors are specified in Schedule 1 of the *National Trade Measurement Regulations 2009*.

Tests

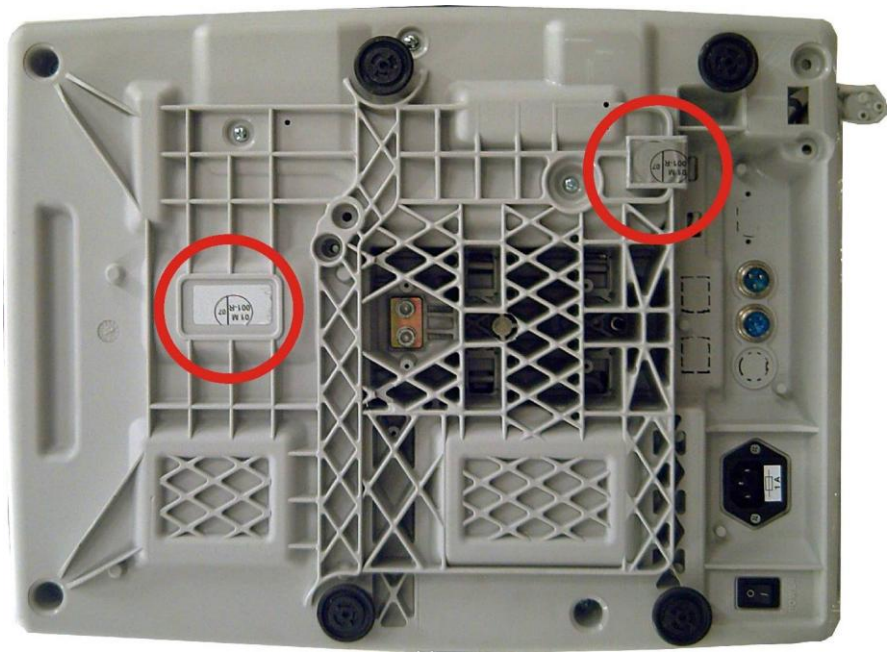
For multi-interval and multiple range instruments with verification scale intervals of e_1, e_2 …, apply e_1 for zero adjustment, and maximum permissible errors apply e_1, e_2 …, as applicable for the load.

FIGURE 6/4D/332 – 1

(Note that the instruments shown in this and subsequent Figures show price and unit price units which are NOT approved for use in Australia)

Dibal Model K-265X Weighing Instrument

FIGURE 6/4D/332 – 2



Typical Sealing Arrangement – K-*** & K-*** T Versions

FIGURE 6/4D/332 – 3

Model K-235X T (Variant 2)

FIGURE 6/4D/332 – 4

Model K-240X DB (Variant 2)

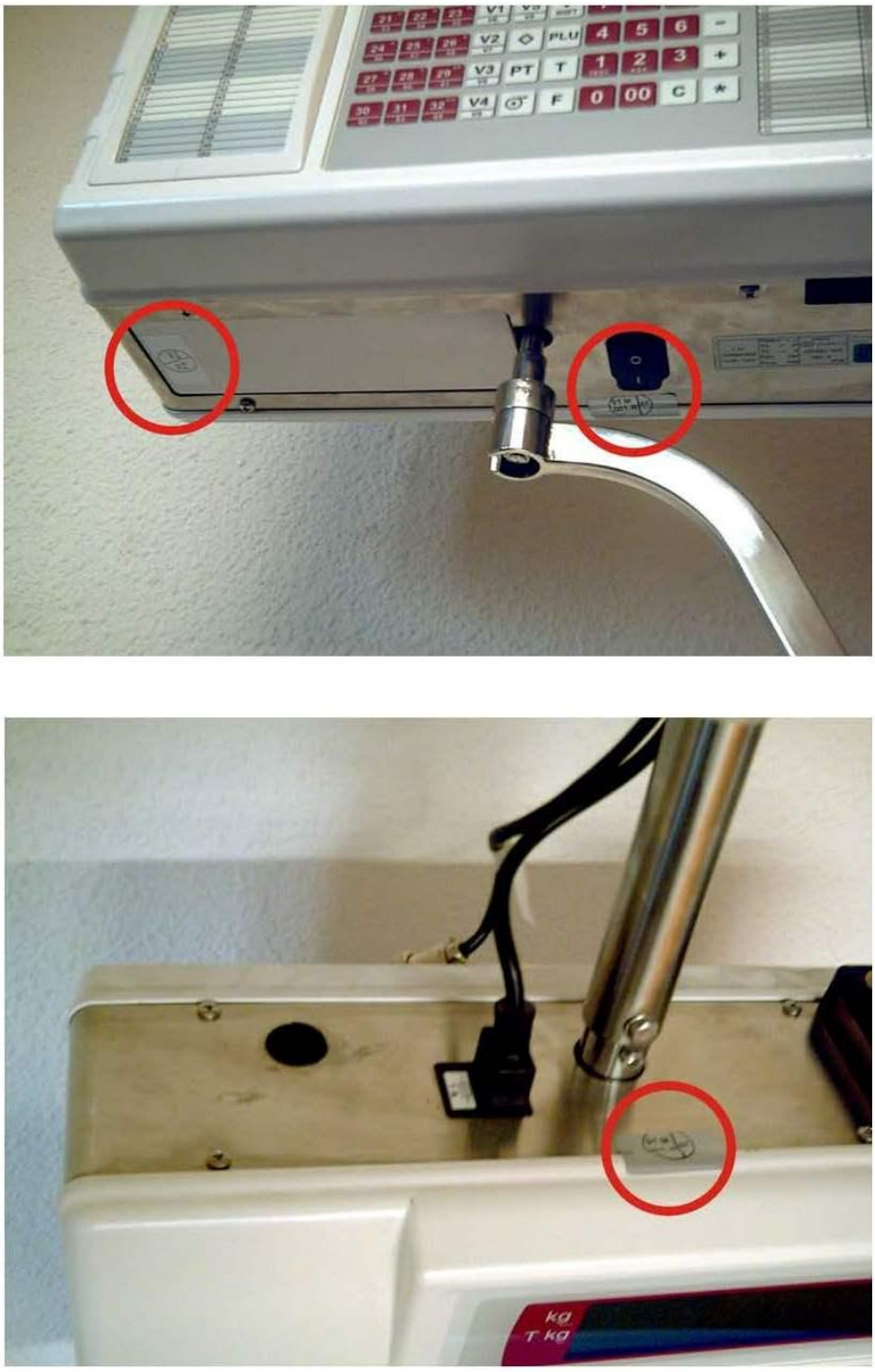
FIGURE 6/4D/332 – 5

Sealing Arrangement – K-*** DB Versions (Variant 2)

FIGURE 6/4D/332 – 6

Models K-255 HA and K-250X HS – Freely-suspended Versions (Variant 2)

FIGURE 6/4D/332 – 7



Typical Sealing – Freely-suspended Versions (Variant 2)

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