

Australian Government

Department of Industry, Innovation and Science

National Measurement Institute

Certificate of Approval

No 6/4C/235

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.

Ohaus Model FD3 Weighing Instrument

submitted by Ohaus Corporation 19A Chapin Road Pine Brook NJ 07058 USA.

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 **1/06/22**, and then every 5 years thereafter.

Rev	Reason/Details	Date
0	Pattern & variants 1 to 3 approved – interim certificate issued	4/05/05
1	Pattern & variants 1 to 3 approved – certificate issued	24/05/05
2	Pattern & variants 1 to 3 reviewed – notification of change issued	15/12/10
3	Pattern & variant 1 to 3 reviewed & updated – certificate issued	30/05/17

DOCUMENT HISTORY

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 6/4C/235' 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.

The National Measurement Institute reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

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

The values of the performance criteria (maximum number of scale intervals etc.) applicable to the instrument shall be within the limits specified herein and in any approval documentation for the components where they are approved separately.

Special

This approval shall NOT be used in conjunction with General Certificate No 6B/0.

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

Dr A Rawlinson

TECHNICAL SCHEDULE No 6/4C/235

1. Description of Pattern

approved on 4/05/05

An Ohaus model FD3 single-interval self-indicating weighing instrument (Figure 1) with a maximum capacity of 3 kg and a verification scale interval of 0.001 kg.

Instruments are NOT FOR TRADING DIRECT WITH THE PUBLIC and shall be so marked.

Instruments are approved for use over a temperature range of 0°C to 40°C and are so marked.

Instruments may be fitted with output sockets (output interfacing capability) for the connection of peripheral and/or auxiliary devices, and also provision for an external tare switch (foot switch).

The instrument is powered via an internal rechargeable battery (6 V) or via a mains adaptor (which also can recharge the internal battery).

Note: The AC/DC mains adaptor supplied was a model S090050031 (#) power supply (output 9 V DC, 500 mA) – the submittor should be consulted regarding the acceptability of alternative power supply units.

(#) This item is also marked 'P/N: 129132', 'Approval No: Q031178', and has an Australian C-tick mark 'N3674'.

The instrument has the load receptor directly supported by a single load cell. The load receptor has maximum nominal dimensions of 209 x 209 mm.

The instrument has an additional function, setting target values and implementing 'under/accept/over' checking - this function is not approved for trade use.

1.1 Zero

Zero is automatically corrected to within $\pm 0.25e$ whenever the instrument comes to rest within 0.5e of zero.

The instrument has a semi-automatic zero-setting device (to set the instrument to within $\pm 0.25e$ of zero) with a nominal range of not more than 4% of the maximum capacity of the instrument.

The instrument has an initial zero-setting device with a nominal range of not more than 20% of the maximum capacity of the instrument.

1.2 Tare

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

Instruments have provision for an external tare switch (foot switch).

In addition, an automatic subtractive taring device of up to the maximum capacity of the instrument may be fitted.

When a taring device is in use, the gross value and tare value may be displayed temporarily by the use of the G/N/T button.

1.3 Display Check

A display check is initiated whenever power is applied.

1.4 Levelling

The instrument is provided with adjustable feet and a level indicator.

1.5 Descriptive Markings and Notices

Instruments carry the following markings:

Manufacturer's mark, or name written in full	Ohaus Corporation	
Indication of accuracy class		
Pattern approval mark for the instrument	NMI 6/4C/235	
Maximum capacity	<i>Max</i> kg*	
Minimum capacity	<i>Min</i> kg*	
Verification scale interval	<i>e</i> = kg*	
Serial number of the instrument		
Special temperature limits	0°C to +40°C	

* These markings shall also be shown near the display of the result if they are not already located there.

In addition, instruments not greater than 100 kg capacity shall carry a notice stating NOT TO BE USED FOR TRADING DIRECT WITH THE PUBLIC, or similar wording.

1.6 Sealing Provision

Provision is made for the calibration adjustments to be protected by correct setting of the 'cal' switch within the instrument and then sealing to prevent access within the instrument by means of a wire and lead seal through the three access screws on the base of the instrument (Figure 2).

The calibration is only protected when the instrument has been configured in 'Legal For Trade' mode and then the 'cal' switch set to protect the calibration. This can be checked by switching the instrument off and then on – in the start up display sequence, 'LFTon' will be shown indicating that the calibration has been set and protected correctly.

1.7 Verification/Certification Provision

Provision is made for a verification mark to be applied.

2. Description of Variant 1

Ohaus model FD6 weighing instrument with a maximum capacity of 6 kg and a verification scale interval of 0.002 kg.

3. Description of Variant 2

Ohaus model FD15 weighing instrument with a maximum capacity of 15 kg and a verification scale interval of 0.005 kg.

4. Description of Variant 3

Displaying the capacity in grams instead of kilograms, e.g. the pattern (model FD3) with a maximum capacity of 3000 g and a verification scale interval of 1 g.

approved on 4/05/05

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TEST PROCEDURE

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

Maximum Permissible Errors

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

FIGURE 6/4C/235 - 1



Note: Additional markings and notices are required – refer to the Technical Schedule.

Ohaus Model FD3 Weighing Instrument

FIGURE 6/4C/235 - 2



Sealing of FD Series Instruments

~ End of Document ~