



United Kingdom of Great Britain and Northern Ireland

Certificate of EC type-approval of a measuring instrument

Number: UK 2655

issued by the Secretary of State for Trade and Industry
Notified Body Number 0126

In accordance with the requirements of the Non-automatic Weighing Instruments Regulations 2000 (SI 2000/3236) which implement, in the United Kingdom, Council Directive 90/384/EEC, this certificate of EC type-approval has been issued to:

Cardinal Scale Manufacturing Co.
203 East Daugherty Street
PO Box 151
Webb City
Missouri, 64870
USA

in respect of a non-automatic weighing instrument, with single interval, utilising the Cardinal Scales 758 CSV indicating device (Test certificate GB-1136) connected to a platform.

		Class III	Class IIII
Maximum capacity	Max	$\leq 5000 e$	$\leq 1000 e$
Minimum capacity	Min	$\geq 20 e$	$\geq 10 e$
Verification scale interval:	e	$\geq 0.1 g$	$\geq 5 g$

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.

Signatory: R P Sanders
for Chief Executive
National Weights & Measures Laboratory
Department of Trade and Industry
Stanton Avenue
Teddington
TW11 0JZ
United Kingdom

Date: 22 October 2002
Valid Until: 21 October 2012
Reference No: STD 10697

Descriptive Annex

1 INTRODUCTION

This instrument utilises the digital indicating device designated the 758 CSV series indicator connected to a weighing platform to form a Class III or IIII, mains or battery operated self-indicating non-automatic weighing instrument.

2 FUNCTIONAL DESCRIPTION

2.1 Devices

The cardinal Scales 758CSV digital weight indicator is fully described in Test Certificate No. GB-1136, and has the following devices:

Semi-automatic zero setting device ($\leq 4\%$ of Max)
Zero-tracking device ($\leq 0.5d/s$ within 4% Max)
Zero indicator
Stability indicator of equilibrium indicator (no motion)
Net / Gross indicator
Semi automatic tare device
Pre-set tare device
Tare weighing device
Display test device
Low battery indicating device
Body Mass Index device

2.2 Loadcells

The indicator can be connected to a weigh platform to form a complete weighing system. Any compatible loadcell(s) may be used providing the following conditions are met:

- There is a respective OIML Certificate of Conformity (R60) or a test certificate (EN45501) issued for the loadcell by a Notified Body responsible for type examination under Directive 90/384/EEC.
- The certificate contains the loadcell types and the necessary loadcell data required for the manufacturer's declaration of compatibility of modules (WELMEC 2, Issue 3, 2000, No 11), and any particular installation requirements. A loadcell marked NH is allowed only if humidity testing to EN45501 has been conducted on this loadcell.
- The compatibility of the loadcells 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 EC conformity of type.
- The loadcell transmission must conform to one of the examples shown in the WELMEC Guide 2.4, "Guide for Loadcells".

3 TECHNICAL DATA

3.1 Technical data for the indicator is provided in Test Certificate No. GB-1136.

4 PERIPHERAL DEVICES AND INTERFACES

4.1 Interfaces

The instrument has the following protected interfaces:

- 12 VDC power input
- 9 pin "D" sub-miniature connector for the loadcell signal input.

4.2 The weighing system may be connected to any non-intelligent recipient peripheral which is technically compatible, has a test certificate issued by a notified body for EC Type Examination to the directive 90/384/EEC in any Member State and bears the CE marking of conformity to the relevant directives.

5 APPROVAL CONDITIONS

The certificate is issued subject to the following conditions:

5.1 Legends and inscriptions

5.1.1 The instrument display shall bear the following legends:

Max
Min
e =

5.1.2 The instrument shall bear the following legends (Figure 4):

CE mark
Verification mark
Green M
Class
Serial number
Manufacturers mark or name
Certificate number

5.2 The Lock/Release key shall not be enabled.

5.3 The 758 CSV is not to be used for direct sales to the public.

6 LOCATION OF SEALS, VERIFICATION MARKS AND CE MARK

6.1 Access to the PCB and the calibration/setup button is prevented by the use of a stainless steel end plate, which is secured into position by a wire and lead seal through the drilled heads of the retaining screws (Figure 5).

The load cell cable connector is also secured to the indicator by the use of a wire and lead seal (Figure 5).

Components that may not be dismantled or adjusted by the user will be secured by a wire and lead seal and securing mark. The securing mark may be either:

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

6.2 The data plate will be mounted on the top-side of the indicator and will be mounted in such a manner that it is easily accessible and clearly visible in its regular operating position.

The CE and verification mark shall be affixed to the instrument and distinctly grouped together. It shall be impossible to remove the CE mark without damaging it. The data plate shall be impossible to remove without it being destroyed.

The markings and inscriptions shall fulfil the requirements of Paragraph 1 of Annex IV of the Directive 90/384/EEC.

7 ILLUSTRATIONS

Figure 1	758 CSV indicator
Figure 2	LCD display and enunciators
Figure 3	758 CSV back panel
Figure 4	Data plate
Figure 5	Sealing diagrams

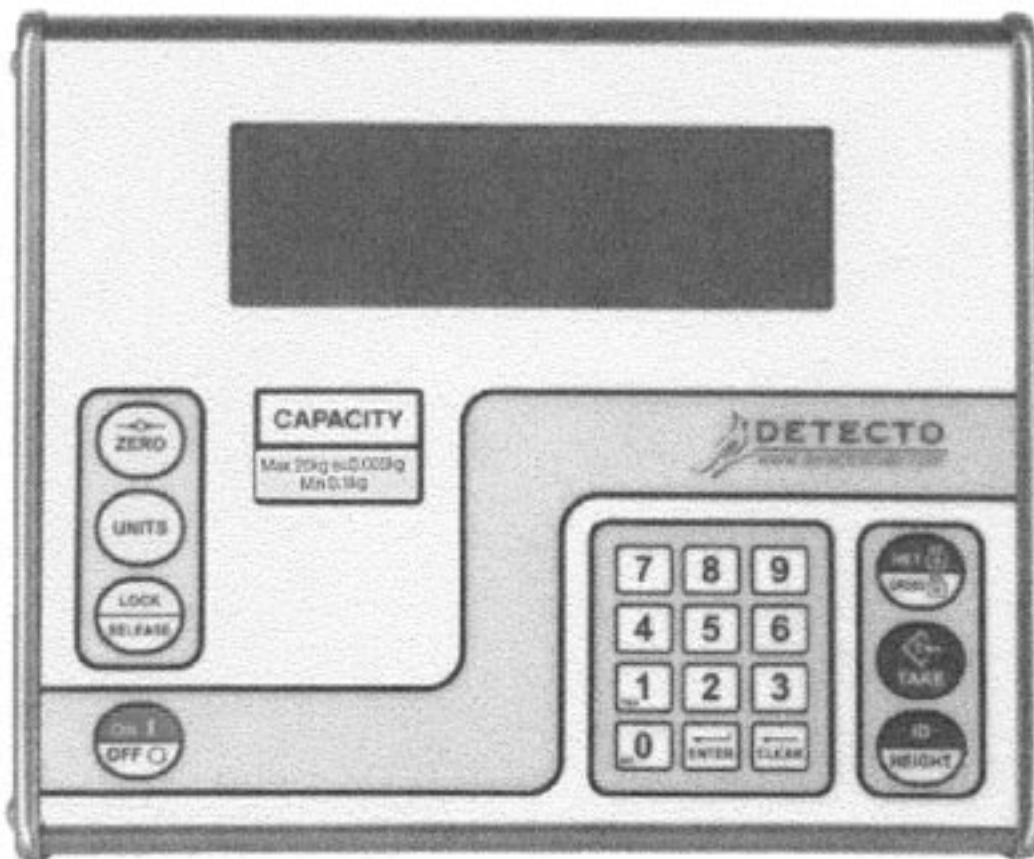


Figure 1 758 CSV indicator

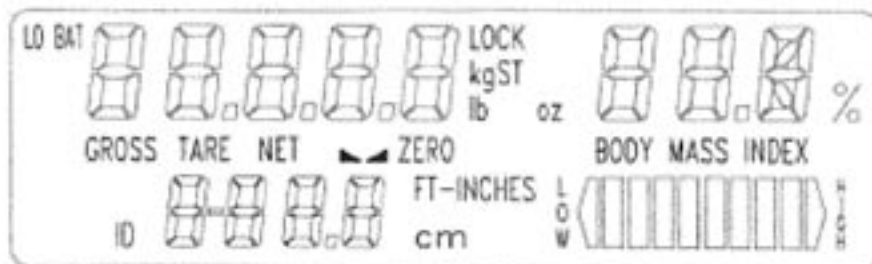


Figure 2 LCD display and annunciators

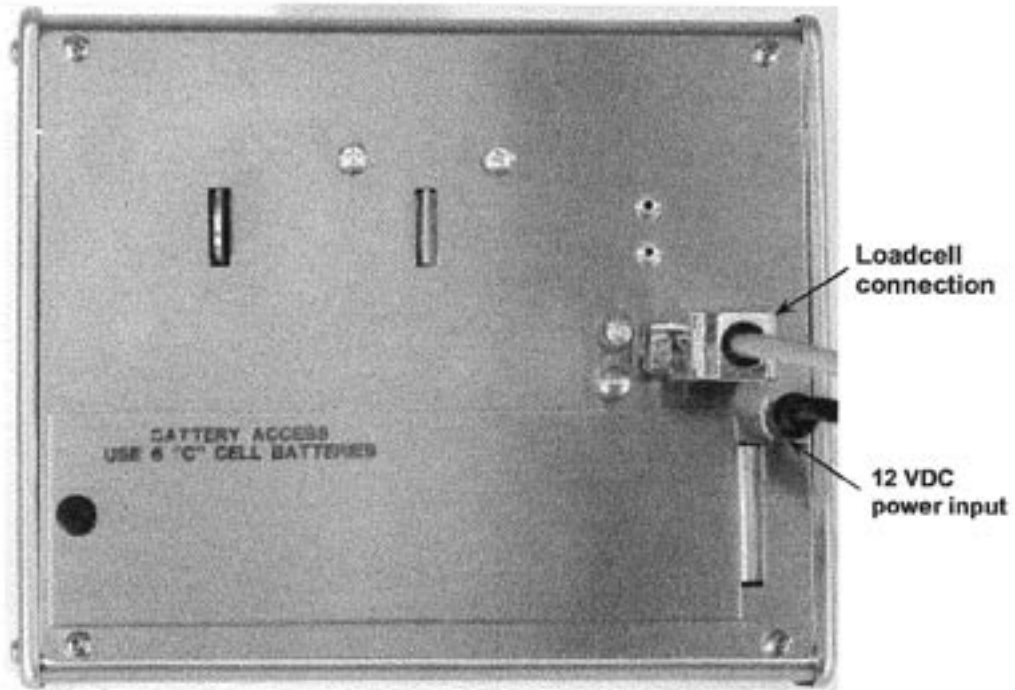


Figure 3 758 CSV back panel

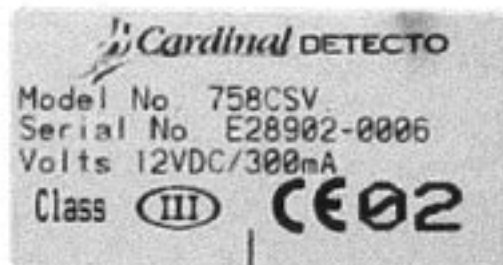


Figure 4 Data plate

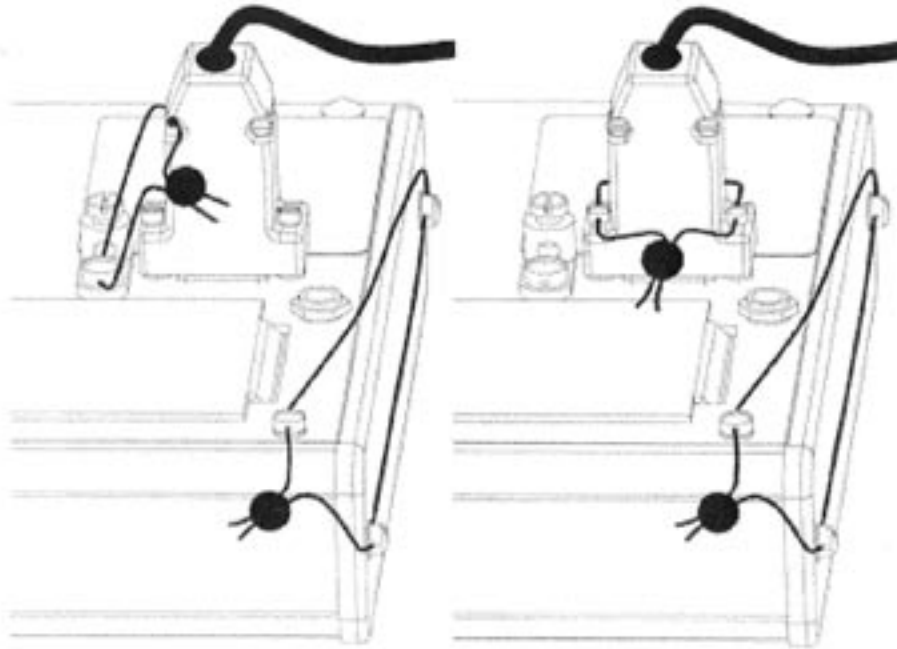


Figure 5 Sealing diagrams