

National Standards Commission



Supplementary Certificate of Approval

No S209A

Issued under Regulation 9
of the
National Measurement (Patterns of Measuring Instruments) Regulations

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

GEC Avery Model L200 Digital Indicator

submitted by GEC Avery Australia Limited
12 Rachael Close
Silverwater NSW 2141.

This Certificate is issued upon completion of a review of NSC approval No S209.

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.

CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/4/98.
This approval expires in respect of new instruments on 1/4/99.

Instruments purporting to comply with this approval shall be marked NSC No S209A and only by persons authorised by the submitter. Instruments incorporating a component purporting to comply with this approval shall be marked NSC No S209A in addition to the approval number of the instrument.

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

It is the submitter's responsibility to ensure that all instruments marked with this approval number are constructed as described in the documentation lodged with the Commission 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 the Commission's Document 106.

The values of the performance criteria (maximum number of scale intervals etc.) applicable to an instrument incorporating the pattern approved herein shall be within the limits specified herein and in any approval documentation for the other components.

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

DESCRIPTIVE ADVICE

Pattern: approved 9/3/93

. A GEC Avery model L200 (and L202) digital mass indicator.

Variants: approved 9/3/93

1. Model L204 (and L206) indicator.
2. Model L205 indicator.

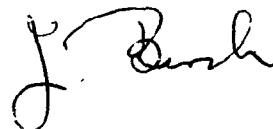
Technical Schedule No S209A describes the pattern and variants 1 and 2.

FILING ADVICE

The documentation for this approval comprises:

Supplementary Certificate of Approval No S209A dated 24/5/93
Technical Schedule No S209A dated 24/5/93 (incl. Table 1 and Test
Procedure)
Figures 1 and 2 dated 24/5/93

Signed and sealed by a person authorised under Regulation 9 of the National Measurement (Patterns of Measuring Instruments) Regulations to exercise the powers and functions of the Commission under this Regulation.





National Standards Commission

TECHNICAL SCHEDULE No S209A

Pattern: GEC Avery Model L200 Digital Indicator.

Submitter: GEC Avery Australia Limited
12 Rachael Close
Silverwater NSW 2141.

1. Description of Pattern

A GEC Avery model L200 digital mass indicator approved for use with up to 7500 verification scale intervals (Table 1), and which may be fitted with input/output sockets for the connection of auxiliary and/or peripheral devices.

The indicator may be connected with up to 12 load cells and incorporates a linearisation facility having 10 intermediate points.

Instruments may be as shown in Figure 1, or in an alternative housing and known as a model L202.

1.1 Zero

Zero is automatically set to within $\pm 0.25e$ whenever the instrument comes to rest within $\pm 0.5e$ of zero. If the instrument comes to rest outside that range but within the zero setting range, zero may be set by pressing the zero button.

1.2 Display Check

A display check is initiated by pressing the TEST button.

1.3 Verification/Certification Provision

Provision is made for a verification/certification mark to be applied.

1.4 Sealing

Provision is made for a seal to be applied at the rear of the indicator to prevent unauthorised removal of the top cover.

1.5 Tare

A semi-automatic taring device and/or a non-automatic (preset) taring device may be fitted. Operation of the taring device is indicated by the NET indicator illuminating and the alphanumeric display showing either PRESET TARE or SEMI-AUTO TARE.

The pattern has additional displays for tare mass values and management data; when not fitted with tare the displays and keyboard are modified accordingly.

a) Semi-automatic Tare

This taring device allows a mass on the load receptor of up to maximum capacity to be tared to within $\pm 0.25e$.

b) Non-automatic (Preset) Tare

This taring device allows up to 9 tare values to be entered via the keyboard and stored in memory.

1.6 Optional Mass Unit

The instrument may be fitted with a facility to allow configuration with another mass unit, viz. 'lb', in which case the instrument shall be marked 'lb not for trade use' or 'lb for export use only'.

1.7 Markings

Instruments are marked with the following data, together in one location:

Manufacturer's name or mark	
Serial number	
Accuracy class	III
Maximum capacity	Max *
Minimum capacity	Min *
Verification scale interval	e = *
Maximum subtractive tare	T = -
NSC approval numbers - indicator	NSC No S209A
- other components	NSC No #

* Repeated in the vicinity of each reading face.

May be located separately from the other markings.

2. Description of Variants

2.1 Variant 1

A GEC Avery model L204 digital indicator which is similar to the pattern but is also fitted with an alphanumeric keyboard for accessing management functions.

The indicator may be in an alternative housing in which case it is known as a model L206.

2.2 Variant 2

A GEC Avery model L205 indicator (Figure 2) which is similar to the model L204 (variant 1) but without the taring device.

TABLE 1

Type: GEC Avery	L200/L202/L204/L205/L206
Maximum number of verification scale intervals	7500
Minimum sensitivity	0.6×10^{-3} mV/scale interval
Excitation voltage	10, 15 or 20 V DC
Minimum load impedance	20, 30 or 40 ohms
Maximum excitation current	500 mA

TEST PROCEDURE

Instruments shall be tested in conjunction with any tests specified in the approval documentation for the instrument to which the pattern is connected, as appropriate, and in accordance with any relevant tests specified in the Inspector's Handbook.

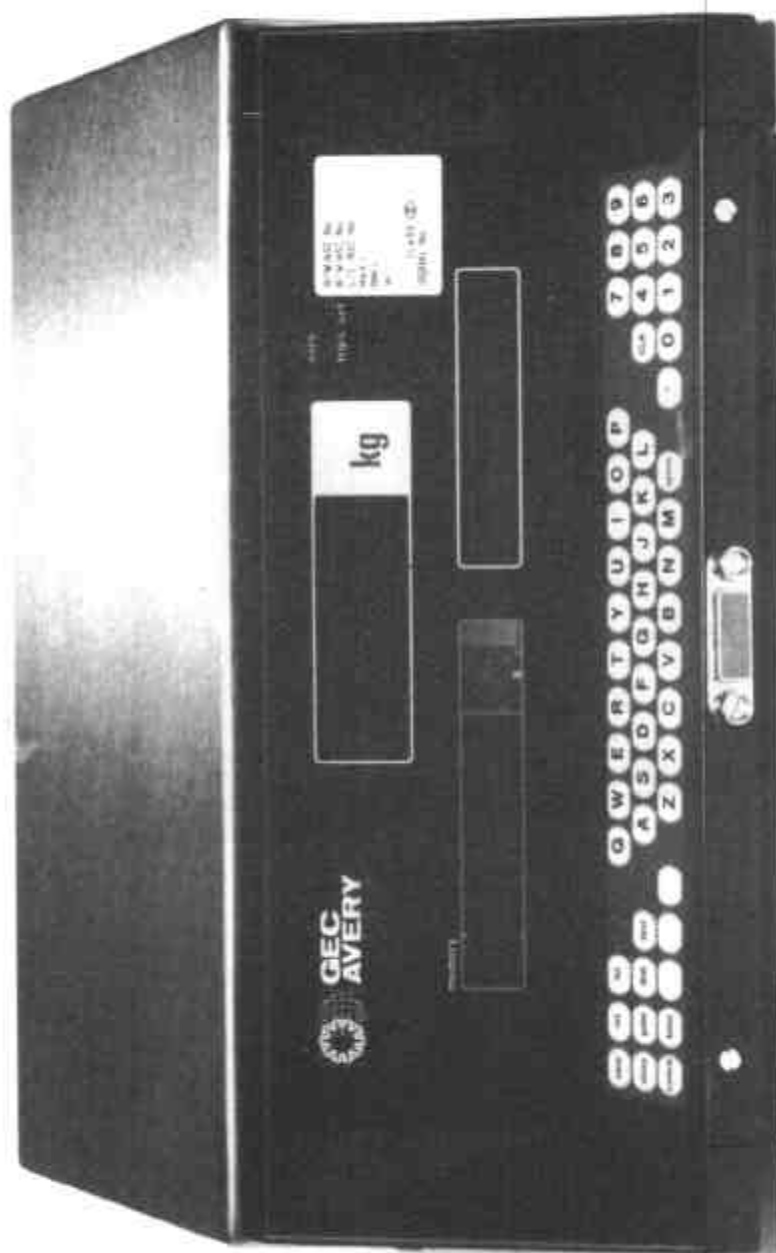
The maximum permissible errors applicable are those applicable to the system to which the instrument approved herein is fitted, as stated in the approval documentation for the system.

FIGURE S209A - 1



GEC Avery Model L200 Indicator

FIGURE S209A - 2



GEC Avery Model L205 Indicator