

National Standards Commission



Supplementary Certificate of Approval

No S247

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

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

Avery Model L105 Digital Indicator

submitted by Avery Australia Ltd
3 Birmingham Avenue
Villawood NSW 2163.

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



CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/2/94.

This approval expires in respect of new instruments on 1/2/95.

Instruments purporting to comply with this approval shall be marked NSC No S247 and only by persons authorised by the submitter.

Instruments incorporating a component purporting to comply with this approval shall be marked NSC No S247 in addition to the approval number of the instrument.

It is the submitter's responsibility to ensure that all instruments marked with this approval number are constructed as described in the drawings and specifications 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.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificates Nos S1/0 and/or S2/0, as appropriate.

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 12/1/89

. An Avery model L105 digital mass indicator.

Technical Schedule No S247 describes the pattern.

Variant: approved 6/6/89

1. With a non-automatic taring device.

Technical Schedule No S247 Variation No 1 describes variant 1.

Variant: approved 2/2/90

2. With battery-powered operation.

Variant: approved 7/8/90

3. Model L107 digital indicator.

Technical Schedule No S247 Variation No 2 describes variants 2 and 3.

Variant: approved 31/10/90

4. Model L105 with additional displays and totalising facility.

Technical Schedule No S247 Variation No 3 describes variant 4.

FILING ADVICE

Supplementary Certificate of Approval No S247 dated 8/10/90 is superseded by this Certificate and may be destroyed. The documentation for this approval now comprises.

Supplementary Certificate of Approval No S247 dated 31/5/91
Technical Schedule No S247 dated 6/3/89 (incl. Table 1 and Test Procedure)
Technical Schedule No S247 Variation No 1 dated 18/8/89
Technical Schedule No S247 Variation No 2 dated 8/10/90
Technical Schedule No S247 Variation No 3 dated 31/5/91
Figure 1 dated 6/3/89
Figure 2 dated 31/5/91

TECHNICAL SCHEDULE No S247

Pattern: Avery Model L105 Digital Indicator.

Submittor: Avery Australia Ltd
3 Birmingham Avenue
Villawood NSW 2163.

1. Description of Pattern

A digital mass Indicator approved for use with up to 6000 verification scale intervals.

The Indicator has a linearisation facility with up to 9 programable points, and may be used with Commission-approved load cells requiring linearisation. It may also be fitted with output sockets for the connection of auxiliary and/or peripheral devices. The instrument may be as shown in Figure 1 or alternatively in a stainless steel housing.

1.1 Zero

Zero is automatically set to within $\pm 0.25e$ whenever the instrument comes to rest within $\pm 0.5e$. 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 whenever the TEST button is pressed.

1.3 Tare

The instrument has a semi-automatic subtractive taring device of up to maximum capacity.

1.5 Verification Provision

Provision is made for a verification mark to be applied.

1.6 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	$e = d =$ *
Maximum subtractive tare	T = - *
NSC approval numbers - Indicator	NSC No S247
- other components #

* Repeated in the vicinity of each reading face.

May be located separately from the other markings.

TABLE 1

Type: Avery	L105
Maximum number of verification scale intervals	6000
Minimum sensitivity	0.5×10^{-3} mV/scale interval
Excitation voltage	12 V
Minimum load impedance	43.75 ohms
Maximum excitation current	274 mA

TEST PROCEDURE

Instruments should be tested in conjunction with any tests specified in the approval documentation for the weighing instrument to which this indicator is connected, and in accordance with any relevant tests specified in the Inspector's Handbook.

The results shall not exceed the maximum permissible errors specified in Document 118, 2nd Edition, October 1986.



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TECHNICAL SCHEDULE No S247

VARIATION No 1

Pattern: Avery Model L105 Digital Indicator.

Submittor: Avery Australia Ltd
3 Birmingham Avenue
Villawood NSW 2163.

1. Description of Variant 1

With a keyboard-entered non-automatic taring device of up to maximum capacity.

Indicators fitted to Instruments of 30 kg capacity or less shall be marked NOT FOR TRADING DIRECT WITH THE PUBLIC, or NOT FOR RETAIL COUNTER USE, or similar wording.



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TECHNICAL SCHEDULE No S247

VARIATION No 2

Pattern: Avery Model L105 Digital Indicator.

Submittor: Avery Australia Ltd
3 Birmingham Avenue
Villawood NSW 2163.

1. Description of Variants

1.1 Variant 2

With battery-powered operation.

1.2 Variant 3

An Avery model L107 digital indicator which is similar to the model L105 but in an alternative housing and which may also be fitted with a set point facility.



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TECHNICAL SCHEDULE No S247

VARIATION No 3

Pattern: Avery Model L105 Digital Indicator.

Submitter: Avery Australia Ltd
3 Birmingham Avenue
Villawood NSW 2163.

1. Description of Variant 4

Model L105 indicator with a totalising facility, and with additional remote displays; one of the displays incorporates a series of operating buttons (Figure 2).

The totalising facility allows the results of successive weighings to be summed by the use of the ADD TOTAL button, provided that the scale is returned to within its zero range between weighings. Pressing the DISPLAY TOTAL button will cause the total to be displayed and a light marked TOTAL to illuminate. A CLEAR TOTAL button resets the totaliser.

National Standards Commission



NOTIFICATION OF CHANGE

SUPPLEMENTARY CERTIFICATE OF APPROVAL No S247

CHANGE No 1

The following change is made to the approval documentation for the

Avery Model L105 Digital Indicator

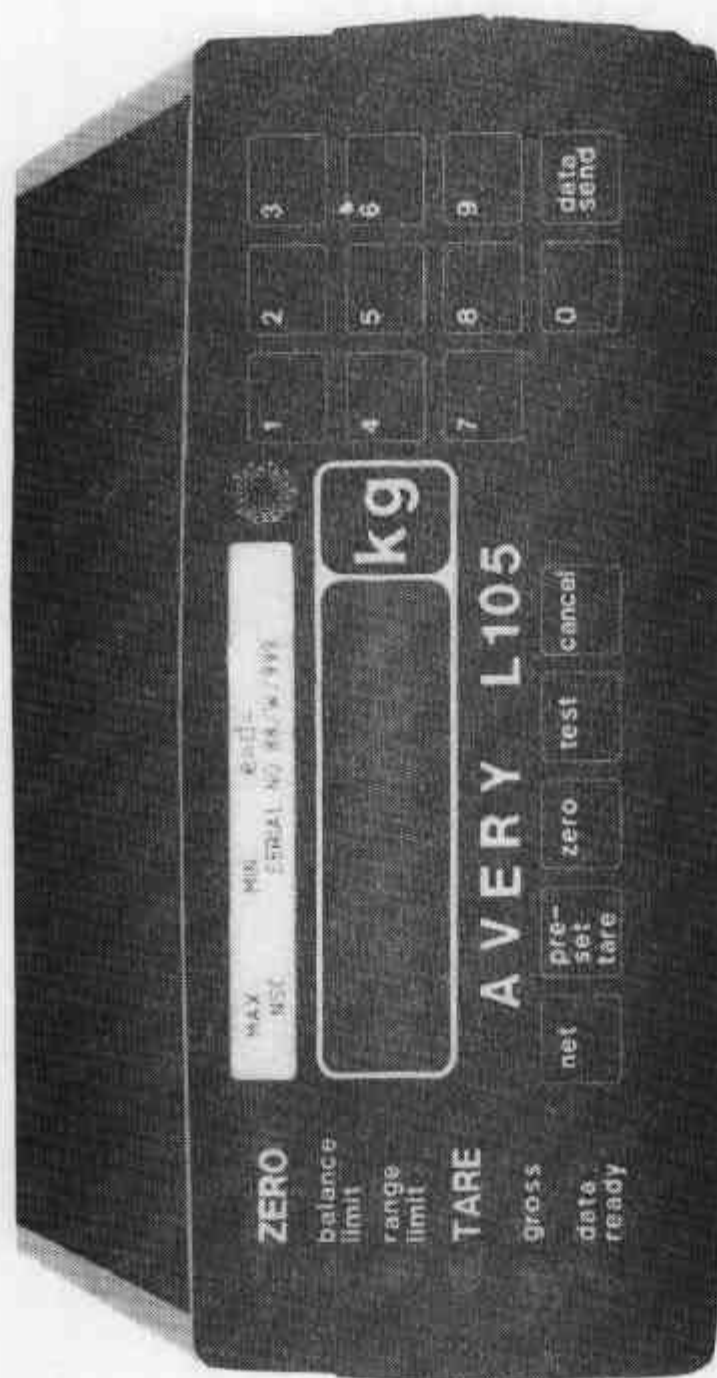
submitted by GEC Avery Australia Ltd
 (Formerly Avery Australia Limited)
 12 Rachael Close
 Silverwater NSW 2141

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.

In Technical Schedule No S247 dated 6/3/89, the following is added to the second paragraph of clause 1. Description of Pattern:

The labelling on the instrument facia may be as shown in Figure 1 or alternatively 'ZERO' may be marked as 'BALANCE' and 'TARE' may be marked as 'NET'.

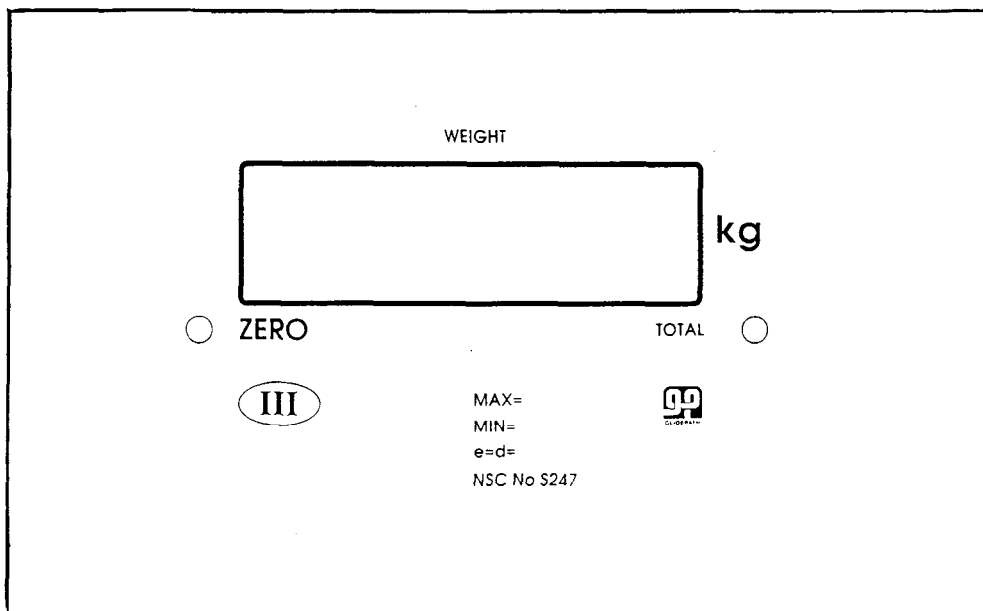
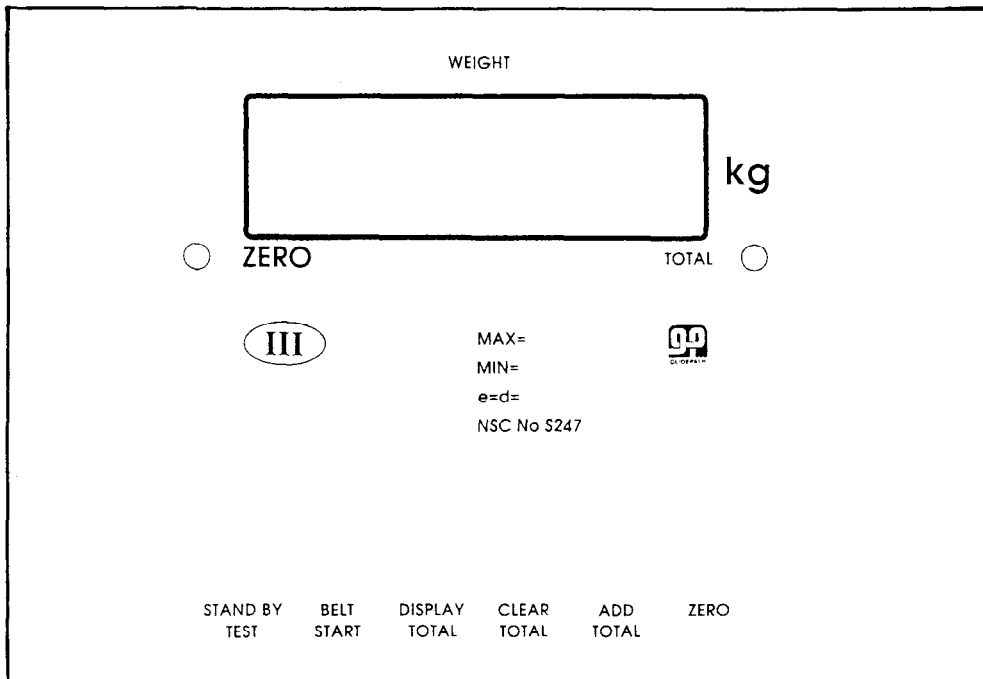
FIGURE S247 - 1



Avery Model L105 Indicator

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FIGURE S247 - 2



Model L105 Indicators - Variant 4, With Totalising Facility