



6/4C, 19  
8/7/88

# NATIONAL STANDARDS COMMISSION

## NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

### REGULATION 9

#### CERTIFICATE OF APPROVAL No 6/4C/49

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

Avery Model 3359 Weighing Instrument

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

#### CONDITIONS OF APPROVAL

This approval is subject to review on or after 1/1/90.  
This approval expires in respect of new instruments on 1/1/91.

Instruments purporting to comply with this approval shall be marked NSC No 6/4C/49.

This approval may be withdrawn if instruments are constructed other than in accordance with the drawings and specifications lodged with the Commission.

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

Signed

Executive Director

#### Descriptive Advice

Pattern: approved 5/12/84

- A self-indicating weighing instrument of 30 kg capacity with a verification scale interval of 0.010 kg.

Technical Schedule No 6/4C/49 describes the pattern.

Variants: approved 30/9/86

1. In alternative housings and known as a model L101/H202.
2. Of 15 kg capacity with a verification scale interval of 0.005 kg.

Technical Schedule No 6/4C/49 Variation No 1 describes variants 1 and 2.

Certificate of Approval No 6/4C/49

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Variants: approved 26/3/87

3. With a model H201 basework of 6 kg capacity with a verification scale interval of 0.002 kg.
4. With a model L102 indicator, which has set point capability.

Technical Schedule No 6/4C/49 Variation No 2 describes variants 3 and 4.

Variant: approved 13/5/88

5. With an Avery model T103 load cell.

Technical Schedule No 6/4C/49 Variation No 3 describes variant 5.

Filing Advice

Certificate of Approval No 6/4C/49 dated 17/8/87 is superseded by this Certificate and may be destroyed.

Note:

Technical Schedule No 6/4C/49 Variation No 1 dated 29/12/86 should have the following added to the description of variant 1:

"The model H202 platform is nominally 350 mm x 350 mm."

The documentation for this approval now comprises:

Certificate of Approval No 6/4C/49 dated 8/7/88  
Technical Schedule No 6/4C/49 dated 25/3/85  
Technical Schedule No 6/4C/49 Variation No 1 dated 29/12/86  
Technical Schedule No 6/4C/49 Variation No 2 dated 17/8/87  
Technical Schedule No 6/4C/49 Variation No 3 dated 8/7/88  
Test Procedure No 6/4C/49 dated 25/3/85  
Figure 1 dated 25/3/85  
Figures 2 and 3 dated 29/12/86  
Figure 4 dated 17/8/87



# NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No 6/4C/49

Pattern: Avery Model 3359 Weighing Instrument

Submittor: Avery Australia Limited  
3-5 Birmingham Avenue  
Villawood NSW 2131

## 1. Description of Pattern

A self-indicating weighing instrument (Figure 1) of 30 kg capacity with 0,010 kg scale intervals. The instrument has a single-sided display and may be fitted with output sockets for the connection of peripheral and/or auxiliary devices.

### 1.1 Zero

Zero is automatically corrected to within  $\pm 0,25e$  whenever the instrument comes to rest within 0,5e of zero. If the instrument comes to rest outside that range but within the zero reset range, zero may be reset by pressing the zero button. The zero light illuminates whenever zero is within 0,25e.

### 1.2 Display Check

A display check is initiated whenever power is applied or when the test button is pressed.

### 1.3 Markings

The instrument is marked with the following data, together in one location:

Manufacturer's name or mark	
NSC approval number	NSC No 6/4C/49
Accuracy class	(III)
Maximum capacity	Max 30 kg *
Minimum capacity	Min 0,5 kg *
Verification scale interval	$e = d = 0,01 \text{ kg} *$
Maximum subtractive tare	$T = -30 \text{ kg}$

The instrument must also be marked NOT FOR RETAIL COUNTER USE.

\* These markings are repeated close to the reading face if not already in that vicinity.

- Note: The instrument serial number is located at the back of the instrument.

### 1.4 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.

### 1.5 Verification Provision

Provision is made for a verification mark to be applied.

### 1.6 Tare

The semi-automatic subtractive taring facility allows a mass on the load receptor of up to maximum capacity to be tared to within  $\pm 0,25e$ , as indicated by the zero and tare lights illuminating. Removal of the tared mass results in either the indicator blanking or the tare being automatically cancelled, depending on which option is selected internally.

TEST PROCEDURE No 6/4C/49

All load applications to the instrument should be in accordance with the Commission's recommended testing procedure for the elimination of rounding error as set out in Document 104.

The maximum permissible errors are:

- ± 0.5e for loads between 0 and 500e;
- ± 1.0e for loads between 501e and 2000e; and
- ± 1.5e for loads above 2000e.

1. Zero Test

As the automatic device resets zero when the weighing mechanism is in equilibrium within 0.5e of zero, zero should be checked as described in Document 104, with a load equal to, say, 10e on the load receptor. The indications with 0.25e and 0.75e additional mass on the load receptor will be 10e and 11e respectively.

2. Zero Range

The maximum range of operation of the zero setting device should not exceed 4% of the maximum capacity (±2% approximately). With zero balance indicated apply a load of, say, 2.5% of maximum capacity to the instrument and press the zero button; the instrument should not rezero.

3. Load Test

Test loads are to be applied to the instrument in not less than 5 approximately equal steps increasing to maximum capacity, followed by decreasing loads in not less than 5 approximately equal steps to zero load.

4. Range of Indication

- (a) The maximum mass indicated should not exceed the marked maximum capacity by more than 10e; above this indicated mass the indication should be blank or show non-numerical characters.
- (b) The minimum mass indicated should be zero; below this the indication should be blank or show non-numerical characters.

5. Taring

- (a) The tare function should reset the mass indicator to zero within 0.25e at any load within its tare capacity. This may be checked as described for Zero Test.
- (b) Attempt to tare a mass above the maximum tare capacity. On removal of the mass no tare should have been entered and the indicator should display all zeroes.



# NATIONAL STANDARDS COMMISSION

6/4C/49  
29/12/86

## TECHNICAL SCHEDULE No 6/4C/49

### VARIATION No 1

Pattern: Avery Model 3359 Weighing Instrument.

Submittor: Avery Australia Limited  
3 Birmingham Avenue  
VILLAWOOD NSW 2131.

#### 1. Description of Variants

##### 1.1 Variant 1

In alternative housings and known as a model L101/H202 (or H202/L101), where L101 refers to the indicator (Figure 2) and H202 to the basework (Figure 3).

Note: The following alternative wording of notices is acceptable;

SET LEVEL ON ALL FOUR FEET, and

NOT TO BE USED FOR WEIGHING IN THE PRESENCE OF THE PURCHASER.

##### 1.2 Variant 2

Of 15 kg capacity with a verification scale interval of 0.005 kg.



# NATIONAL STANDARDS COMMISSION

6/4C/49  
17/8/87

## TECHNICAL SCHEDULE No 6/4C/49

### VARIATION No 2

Pattern: Avery Model 3359 Weighing Instrument

Submittor: Avery Australia Limited  
3 Birmingham Avenue  
VILLAWOOD NSW 2131

#### 1. Description of Variants

##### 1.1 Variant 3

With a model H201 basework of 6 kg capacity with a verification scale interval of 0.002 kg. The platform is nominally 230 mm x 230 mm.

##### 1.2 Variant 4

With a model L102 indicator (Figure 4) which is similar to the model L101, but is also fitted with a set point facility with appropriate buttons and an associated UNDER/ACCEPT/OVER display.

In addition to the semi-automatic taring device of the model L101, this model has a keyboard-entered non-automatic device of up to maximum capacity to permit setting of tare to within 0.5e, used as follows:

- a) With the platter empty, press TARE.
- b) Enter a value using the numeric keyboard (only values in multiples of e will be accepted).
- c) Press ENTER.



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## TECHNICAL SCHEDULE No 6/4C/49

### VARIATION No 3

**Pattern:** Avery Model 3359 Weighing Instrument.

**Submittor:** Avery Australia Limited  
3 Birmingham Avenue  
Villawood NSW 2131.

#### 1. Description of Variant 5

With the Avery model 8707 15 kg load cell used in the pattern and variants replaced by the Avery model T103 15 kg load cell.

FIGURE 6/4C/49



Avery Model 3359



FIGURE 6/4C/49 - 2



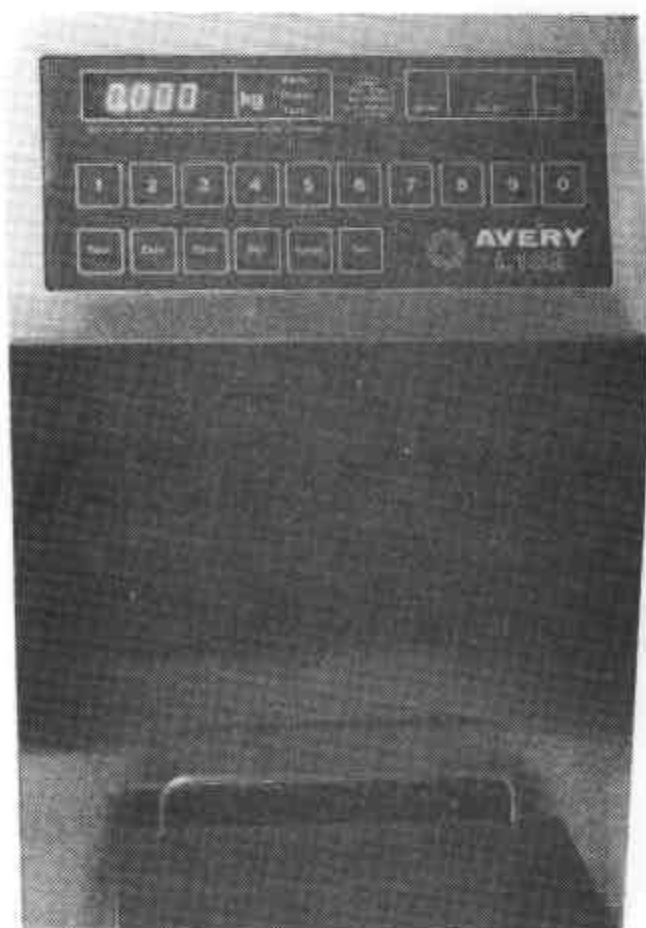
Avery L101 Indicator

FIGURE 6/4C/49 - 3



Avery H202 Basework

FIGURE 6/4C/49 - 4



Model L102 Indicator