



NATIONAL STANDARDS COMMISSION

NATIONAL MEASUREMENT (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

SUPPLEMENTARY CERTIFICATE OF APPROVAL No S208

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

Yamato Model EDI-302 Digital Indicator

submitted by Yamato Scale (Australia) Pty Ltd
16 Gertrude Street
Arncliffe NSW 2205.

Conditions of Approval

This approval is subject to review on or after 1/9/91.
This approval expires in respect of new instruments on 1/9/92.

Instruments purporting to comply with this approval shall be marked NSC No S208.

This approval may be withdrawn if instruments are constructed other than as described in the drawings and specifications lodged with the Commission.

The number of scale intervals applicable to any weighing instrument in which this indicator is used shall be no greater than the number of verification scale intervals approved for the basework, or the load cell(s) or the indicator (8000e) whichever is the smallest.

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 26/8/86

. Yamato model EDI-302 digital indicator.

Technical Schedule No S208 describes the pattern.

Filing Advice

The documentation for this approval comprises:

Supplementary Certificate of Approval No S208 dated 25/2/87
Technical Schedule No S208 dated 25/2/87
Test Procedure No S208 dated 25/2/87
Figure 1 dated 25/2/87



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No S208

Pattern: Yamato Model EDI-302 Digital Indicator

Submitter: Yamato Scale (Australia) Pty Ltd
16 Gertrude Street
Arncliffe NSW 2205.

1. Description of Pattern

A digital mass indicator (Figure 1) approved for use with up to 8000 verification scale intervals. The indicator may be provided with output sockets for the connection of auxiliary and/or peripheral devices. (Note: The numeric keyboard fitted to the instrument is inoperative.)

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 $\pm 0.25e$.

1.2 Tare

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

1.3 Totalising

The instrument may have a memory function allowing successive weighings to be totalised.

1.4 Display Check

A display check is initiated whenever power is applied to the instrument.

1.5 Marking

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

Manufacturer's name or mark	
Accuracy class	III
Serial number of instrument	
Maximum capacity	Max *
Minimum capacity	Min *
Verification scale interval	$e = d = \dots *$
Maximum subtractive tare	$T = - \dots$
NSC approval numbers - Indicator	NSC No S208
- Other components (as appropriate)	
Load cell serial number(s)	

* These markings are repeated in the vicinity of each reading face, if not already in that position.

The indicator shall also be marked NOT FOR RETAIL COUNTER USE.

1.6 Verification Mark

Provision is made for a verification mark to be applied.



NATIONAL STANDARDS COMMISSION

TEST PROCEDURE No S208

The following tests should be carried out in conjunction with any test procedures in the approval documentation for the instrument to which this indicator is connected.

All load applications 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:

- $\pm 0.5e$ for loads between 0 and 500e;
- $\pm 1.0e$ for loads between 501e and 2000e; and
- $\pm 1.5e$ 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 ($\pm 2\%$ 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. Range of Indication

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.

Below zero the indication should blank or show a mass preceded by a minus sign.

4. Load Test

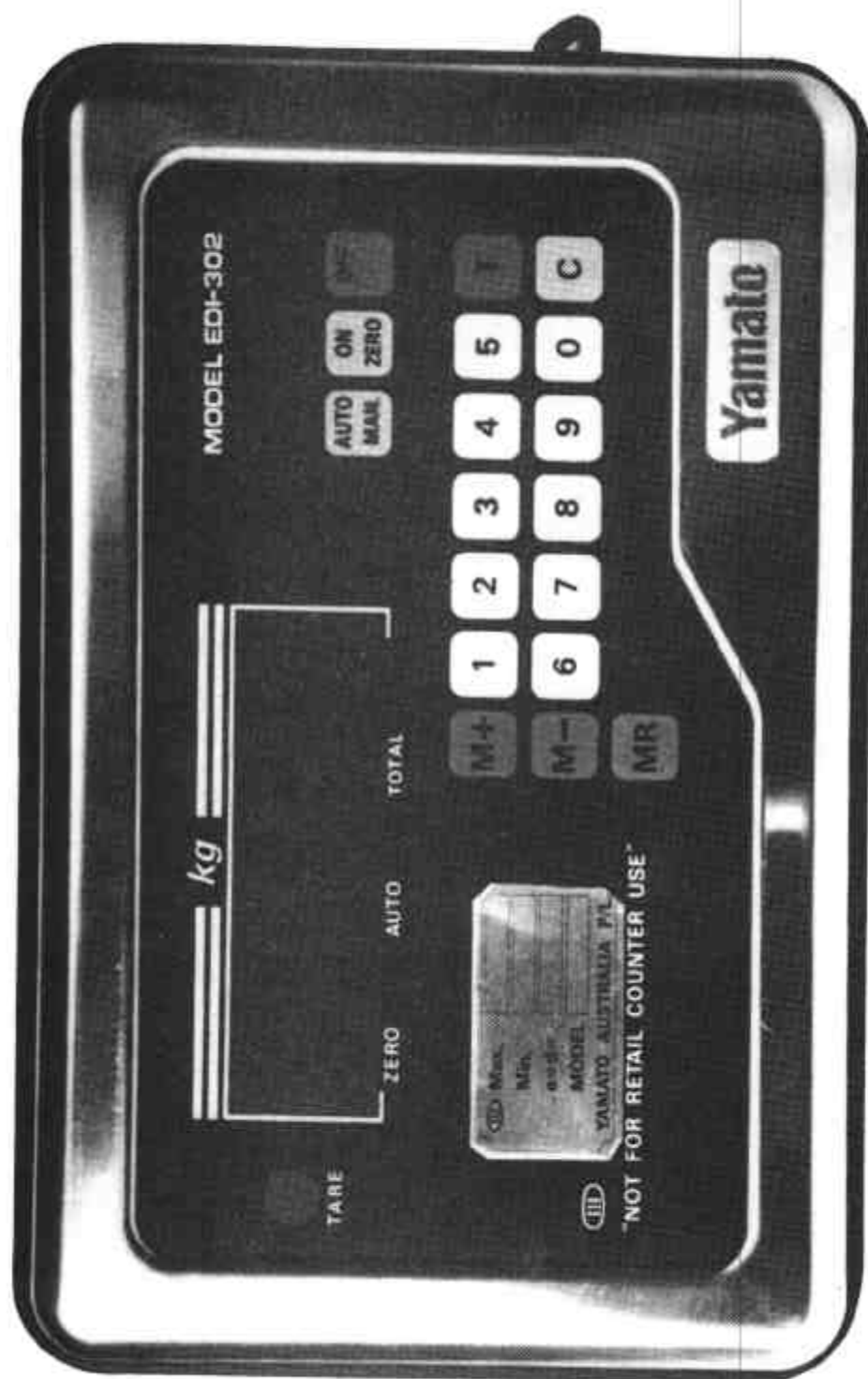
Test loads are to be applied to the complete weighing instrument increasing in not less than 5 approximately equal steps to maximum capacity, followed by decreasing loads in not less than 5 approximately equal steps to zero load.

5. Tare Test

The semi-automatic taring device (where fitted) shall be able to reset the mass indicator to zero within $\pm 0.25e$ at any load within its capacity; this may be checked as described for Zero Test.

A tare shall not be able to be acquired above the maximum tare range marked on the instrument.

FIGURE S208 - 1



Yamato EDI-302 Indicator