



ORIGINAL

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NATIONAL STANDARDS COMMISSION
WEIGHTS AND MEASURES (PATTERNS OF INSTRUMENTS) REGULATIONS

REGULATION 9

SUPPLEMENTARY CERTIFICATE OF APPROVAL No S142

This is to certify that an approval has been granted by the Commission that the pattern and variants of the

Philips Model PR1555 Digital Indicator

submitted by Rite-Weigh Scale Service Pty Ltd
9 Wetherill Street
Lidcombe, NSW, 2141

are suitable for use for trade, when used in a Commission-approved weighing instrument.

The approval is subject to review on or after 1/2/88.

Instruments purporting to comply with this approval shall be marked NSC No S142 in addition to the approval number of the pattern to which they are connected.

Relevant drawings and specifications are lodged with the Commission.

Condition of Approval

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 indicator, the basework, or the load cell(s), whichever is the smallest.

Signed

Executive Director

Descriptive Advice

Pattern: approved 22/12/82

- Philips model PR1555 digital indicator approved for a maximum of 3500 scale intervals.

Variants: approved 22/12/82

1. With an output socket for peripheral equipment.
2. Without the automatic zero tracking device.

Filing Advice

The documentation for this approval comprises:

Certificate of Approval No S142 dated 24/1/83
Technical Schedule No S142 dated 24/1/83
Test Procedure No S142 dated 24/1/83
Figure 1 dated 24/1/83.

24/1/83



NATIONAL STANDARDS COMMISSION

TECHNICAL SCHEDULE No S142

Pattern: Philips Model PR1555 Digital Indicator.

Submitter: Rite-Weigh Scale Service Pty Ltd
9 Wetherill Street
Lidcombe, NSW, 2141.

1. Description of Pattern

Philips model PR1555 digital mass indicator (Figure 1) displaying up to 3500 scale intervals.

1.1 Markings

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

Manufacturer's name or mark
NSC approval numbers

Indicator NSC No S142
Basework NSC No
Load cell(s) NSC No..

Accuracy class

III

Maximum capacity in the form

Max*

Minimum capacity in the form

Min*

Maximum subtractive tare in the form

T = -*

Verification scale interval in the form

e = d =*

Indicator serial number

Load cell serial number(s) - refer para. 1.5(b)

1.2 Zero

Zero within 0.25e, indicated by the ZERO light being illuminated, may be obtained either by using the tool-operated ZERO control, or automatically by means of the automatic zero tracking device whenever the instrument comes to rest within 0.5e of zero.

1.3 Display Check

Pressing the CHECK button causes all segments and lights to blank, and then to illuminate.

1.4 Tare

Use of the subtractive tare push button marked TARE, allows a mass on the receptor of up to maximum capacity to be tared to within 0.25e, and is indicated by the ZERO and TARE lights illuminating. When the mass is removed, the tare value prefixed by a minus sign is displayed.

* These markings are repeated in the vicinity of all reading faces, if not already there.

1.5 Sealing

- (a) By a lead and wire seal, with the wire passing through the four cover-retaining screws (Figure 1).
- (b) The load cell serial number(s) may be on metal tags sealed to the indicator housing, or marked on the nameplate.

2. Description of Variants2.1 Variant 1

With an output socket for the connection of peripheral equipment.

2.2 Variant 2

Without the automatic zero tracking device.

TEST PROCEDURE No S142

The following tests should be carried out in conjunction with any test procedures in the Technical Schedule of the instrument to which this indicator is connected.

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:

- $\pm 0.5e$ for loads between 0 and 500e;
- $\pm 1e$ for loads between 501e and 2000e; and
- $\pm 1.5e$ for loads above 2000e.

1. Zero Range

Check that the range of the zero adjustment is not more than 4% of the maximum capacity ($\pm 2\%$ approximately). Satisfactory setting may be checked by the following method:

- (a) With zero balance indicated, apply a load of, say, 2.5% of maximum capacity to the instrument, and adjust the ZERO control; the instrument should not rezero.
- (b) Reduce the load to, say, 1.5%, and again adjust the ZERO control; the instrument should indicate zero balance.

2. Zero Test

- (a) Check by means of Document 104, that when the ZERO light is lit, zero is set within 0.25e.
- (b) As the automatic zero tracking device, where fitted, resets zero when the weighing mechanism is in equilibrium within 0.5 scale interval of zero, zero should be checked with a load equal to, say, 10 scale intervals on the load receptor. The indications with 0.25e and 0.75e additional mass on the load receptor will then be 10e and 11e respectively.

3. Range of Indication

- (a) The maximum mass indicated should not exceed the maximum capacity (Max) by more than 10 scale intervals; above this indicated mass the indicator should be blank.
- (b) Below zero the indication may blank or the mass will be indicated, prefixed by a minus sign.

4. Taring

- (a) Attempt to tare a mass above maximum capacity as determined in 3(a). On removal of the mass no tare should have been entered, and the indicator should display all zeroes.
- (b) 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 in 2(a) - Zero Test.

5. Test Loads

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.

