



Australian Government

National Measurement  
Institute

Bradfield Road, West Lindfield NSW 2070

## Supplementary Certificate of Approval

### NMI S343A

Issued by the Chief Metrologist under Regulation 60  
of the  
National Measurement Regulations 1999

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

A & D Mercury Model AD-4328 Digital Indicator

submitted by       A & D Australasia Pty Ltd  
                          32 Dew Street  
                          THEBARTON   SA   5031

**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.

This approval has been granted with reference to document NMI R 76, *Non-automatic weighing instruments, Parts 1 and 2*, dated July 2004.

This approval becomes subject to review on **1/08/18**, and then every 5 years thereafter.

#### DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern approved – certificate issued	4/07/02
1	Pattern reviewed – notification of change issued	4/10/07
2	Pattern reviewed & updated – certificate issued	11/10/13

## CONDITIONS OF APPROVAL

### General

Instruments purporting to comply with this approval shall be marked with approval number 'NMI S343A' only by persons authorised by the submitter.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI S343A' 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 documentation lodged with the National Measurement Institute (NMI) 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 document NMI P 106.

Signed by a person authorised by the Chief Metrologist to exercise their powers under Regulation 60 of the *National Measurement Regulations 1999*.

A handwritten signature in black ink, appearing to read 'A Rawlinson', with a horizontal line underneath.

Dr A Rawlinson

TECHNICAL SCHEDULE No S343A

**1. Description of Pattern** **approved on 4/07/02**

An A & D Mercury model AD-4328 digital indicator (Figure 1 and Table 1) which is approved for use with up to 6000 verification scale intervals. May also be known as A & D Australasia indicators of the same model.

TABLE 1 — Specifications

Maximum number of verification scale intervals	6000
Minimum sensitivity	0.8 $\mu$ V/scale interval
Excitation voltage	5 V DC
Minimum load impedance	58.3 ohm
Maximum excitation current	86 mA

**1.1 Zero**

Zero is automatically corrected to within  $\pm 0.25e$  whenever the instrument comes to rest within  $0.5e$  of zero.

The instrument has a semi-automatic zero-setting device with a nominal range of not more than 4% of the maximum capacity of the instrument.

**1.2 Tare**


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

**1.3 Display Check**

A display check is initiated whenever power is applied.

**1.4 Descriptive Markings**

Instruments are marked with the following data, together in one location, in the form shown at right:

Manufacturer's mark, or name written in full	A & D Company, Japan
Name or mark of manufacturer's agent	.....
Indication of accuracy class	
Maximum capacity	Max ..... kg #1
Minimum capacity	Min ..... kg #1
Verification scale interval	e = ..... kg #1
Serial number of the instrument	.....
Pattern approval number for the instrument	NMI (or NSC) No S343A
Pattern approval mark for other components	..... #2

#1 These markings are also shown near the display of the result if they are not already located there.

#2 May be located separately from the other markings.

**1.5 Verification Provision**

Provision is made for the application of a verification mark.

## **1.6 Sealing Provision**

The cover over the calibration adjustment switch on the front of the indicator is to be sealed.

### TEST PROCEDURE No S343A

Instruments shall be tested in accordance with any relevant tests specified in the National Instrument Test Procedures.

The instrument shall not be adjusted to anything other than as close as practical to zero error, even when these values are within the maximum permissible errors.

#### **Maximum Permissible Errors**

The maximum permissible errors are specified in Schedule 1 of the *National Trade Measurement Regulations 2009*.

FIGURE S343A – 1



An A & D Mercury Model AD-4328 Digital Indicator

~ End of Document ~