



**Australian Government**  
**Department of Industry, Science,  
Energy and Resources**

**National  
Measurement  
Institute**

36 Bradfield Road, West Lindfield NSW 2070

**Certificate of Approval**  
**NMI 6/10B/96**

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.

SWIA Model SDW-3000 Weighing Instrument

submitted by           Australasia Scales Pty Ltd  
                                  T/A Sensortronic Weighing and Inspection Australasia  
                                  Unit 1/944 Nudgee Road  
                                  Banyo    QLD    4014

**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 October 2015.

This approval is subject to review at the decision of the Chief Metrologist in accordance with the conditions specified in the document NMI P 106.

**DOCUMENT HISTORY**

<b>Rev</b>	<b>Reason/Details</b>	<b>Date</b>
0	Pattern & variants 1 to 2 approved – certificate issued	28/05/21
1	Pattern amended and Figure 1 & Conditions of Approval updated – certificate issued	08/12/21

## CONDITIONS OF APPROVAL

### General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 6/10B/96' and only by persons authorised by the submitter.

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.

Auxiliary devices used with this instrument shall comply with the requirements of General Supplementary Certificate of Approval No S1/0B.

The pattern as approved herein or with substitute approved load cells and/or approved indicators and in other capacities, or with different platform sizes, shall comply with General Certificate of Approval No 6B/0.

Note:

New instruments manufactured under this approval shall only use load cells and/or indicators with current Supplementary Certificates of Approval; and

New instruments manufactured under this approval shall comply with 6-wire cable connection requirements between the junction box and the indicator in the case of analogue load cells are connected parallel to each other in a junction box prior to connection to the indicator as shown in Figures 3a and 3b; and

New instruments manufactured with digital load cells under this approval may be acceptable if prior written agreement from NMI is obtained; and

**Instruments manufactured or converted under this approval shall only use approved indicators with reference to document NMI R 76 dated October 2015 or later.**

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




**Darryl Hines**  
Manager  
Policy and Regulatory  
Services

TECHNICAL SCHEDULE No 6/10B/96

**1. Description of Pattern**

**approved on 28/05/21  
amended on 08/12/21**

A SWIA model SDW-3000 class  non-automatic self-indicating weighing instrument (Figure 1) of 40 000 kg maximum capacity and approved for use with up to 3000 verification scale intervals.

**1.1 Basework**

The model SDW-3000 basework has the platform fully supported by 6 load cells. The dimensions of the platform are 12 x 3 m (nominal).

**1.2 Load Cells**

Six Flintec model RC3-30t-C4 load cells of 30 000 kg capacity are used. The load cells are also described in the documentation of approval NMI S368.

**1.2.1 Load Cell Connection**

The load cells are connected parallel together in a junction box; and 6-wire cable connection is used between the junction box and the indicator as shown in Figure 3a.

**1.3 Indicator**

A SysTec model IT1 digital indicator is used. The indicator is also described in the documentation of approval NMI S731.

**1.4 Weighbridge Requirements**

Where the instrument is intended to be installed as a weighbridge, it shall be ensured that all relevant weighbridge requirements of the National Measurement Legislation are met (e.g. in relation to weighbridge approaches, visibility and the location of the weighbridge indicator and platform).

This approval does not certify that such requirements have (or can be) met.

The requirements of the National Measurement Legislation regarding the ground or floor under the platform vary according to whether the instrument is installed as a weighbridge without a pit or a weighbridge with a pit. However, bolting of the load cell support pads to suitable concrete piers is considered essential to provide a suitable stable base, irrespective of other aspects of instrument installation.

Note that it is important that suitable provision be made for the loading of test masses. For example, clear access for a forklift may be necessary at both sides of the platform.

**1.5 Verification Provision**

Provision is made for the application of a verification mark.

**1.6 Sealing Provision**

Provision is made for the calibration adjustments in the indicator to be sealed as described in the approval documentation for the indicator used.

## 1.7 Descriptive Markings and Notices

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

Manufacturer's mark, or name written in full	SWIA
Indication of accuracy class	Ⓜ
Pattern approval mark for the instrument	NMI 6/10B/96
Pattern approval mark for the indicator	NMI S...
Pattern approval mark for the load cells	NMI S...
Maximum capacity	Max ..... t or kg #1
Minimum capacity	Min ..... t or kg #1
Verification scale interval	e = ..... t or kg #1
Serial number of the instrument	.....

#1 These markings are shown near the display of the result.

## 2. Description of Variant 1 approved on 28/05/21

Other SDW-3000 series instruments in certain other capacities.

The platform is fully supported by no less than 4 and with up to 12 NMI-approved load cells. Instruments may be in capacities of 30 000 kg up to 80 000 kg using approved load cells and an approved digital indicator (in accordance with General Certificate of Approval No 6B/0).

Instruments are approved for use with up to 4000 verification scale intervals (subject to the approval parameters of the load cells and indicator).

Instruments used with more than 3000 verification scale intervals shall be provided with wind protection in accordance with clause **4. Wind Effects** of General Certificate of Approval No 6B/0.

## 3. Description of Variant 2 approved on 28/05/21

CDW-3000 series instruments (Figure 2) which are similar to the pattern but which have a concrete infill load receptor (unlike the SDW-3000 series which has a steel constructed load receptor).

Instruments may be in capacities of 30 000 kg up to 120 000 kg using NMI-approved load cells and an NMI-approved digital indicator (in accordance with General Certificate of Approval No 6B/0).

### TEST PROCEDURE No 6/10B/96

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 6/10B/96 – 1



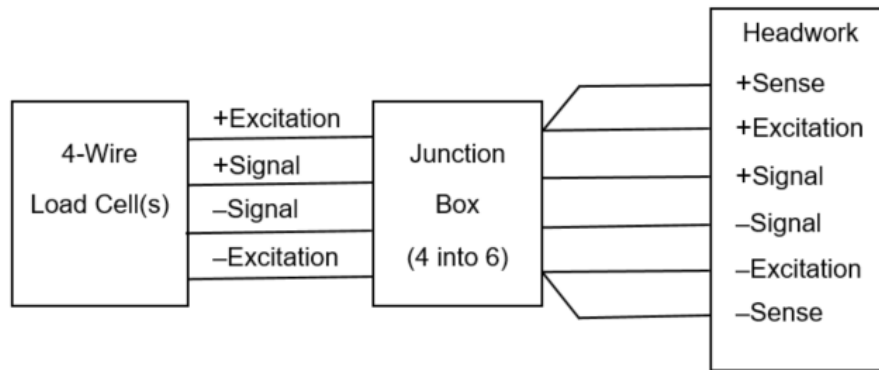
SWIA Model SDW-3000 Weighing Instrument

FIGURE 6/10B/96 – 2

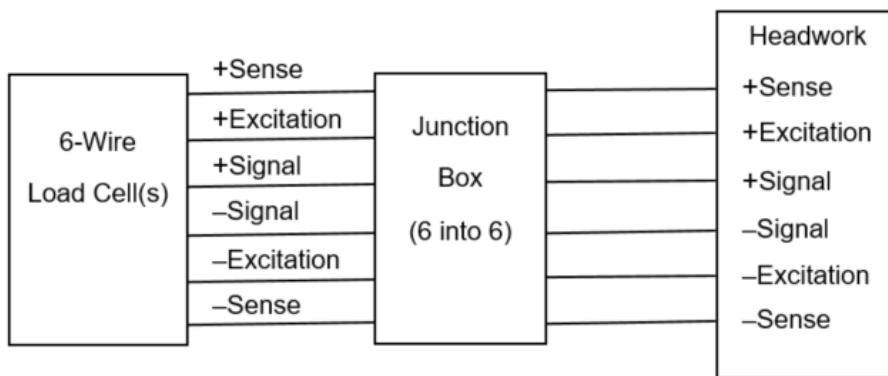


SWIA Model CDW-3000 Weighing Instrument

FIGURE 6/10B/96 – 3



a) 4-Wire Analogue Load Cell Connection Using Junction Box



b) 6-Wire Analogue Load Cell Connection Using Junction Box

~ End of Document ~