



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

**National
Measurement
Institute**

36 Bradfield Road, West Lindfield NSW 2070

Certificate of Approval

NMI 6/9C/324

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.

Associated Scales Model PL3000–PW Weighing Instrument

submitted by Associated Scale Services Pty. Ltd.
Unit 4, 47 Learoyd Road
Acacia Ridge QLD 4110

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

Rev	Reason/Details	Date
0	Pattern approved – certificate issued	18/03/22

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 6/9C/324' 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, 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

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 6/9C/324

1. Description of Pattern **approved on 18/03/22**

An Associated Scales model PL3000–PW class III self-indicating pallet wrapper platform weighing instrument (Figure 1) of 2000 kg maximum capacity with a verification scale interval of 2 kg and with a minimum capacity of 40 kg, and approved for use with up to 1000 verification scale intervals.

A notice shall be provided to the instrument clearly visible to the operator advising how to determine the gross weight of the pallet after wrapping.

1.1 Basework

The model PL3000-PW basework (Figure 1) consists of a chain and sprockets mechanism (including drive motor) incorporated in a circular turntable supported by a base frame which in turn is supported by six load cells. The turntable has a diameter of from 1500 mm to 1650 mm and is able to be rotated about its centre (to facilitate wrapping of the pallet).

Note: Weighing shall be carried out on the complete circular turntable area.

1.2 Load Cells

Six Anyload model 563YH C4 load cells of 2000 kg maximum capacity are used. The load cells are also described in the approval documentation of NMI approval No S566.

1.2.1 Load Cell Connection

The load cells are connected parallel to each other in a junction box; and 6-wire cable connection is used between the junction box and the indicator as shown in Figures 3a and 3b.

1.3 Indicator

A Dini Argeo model DFWL digital indicator (Figure 2) is used. The indicator is also described in the approval documentation of NMI approval No S788.

1.4 Zero

A zero-tracking device may be fitted.

The initial zero-setting device has a nominal range of not more than 20% of the maximum capacity of the instrument.

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.

1.5 Tare

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

1.6 Power Supply

Power supply may be by:

- AC mains power (110-240 V AC, 50/60 Hz); and/or
- an internal/external 6 V rechargeable battery.

1.7 Display Check

A display check is initiated whenever power is applied.

1.8 Levelling


Instruments are installed in a permanently fixed location.

1.9 Verification Provision

Provision is made for the application of a verification mark.

1.10 Descriptive Markings and Notices

Instruments are marked with the following data:

Manufacturer's mark, or name written in full	Associated Scale Services
Indication of accuracy class	
Pattern approval number for the instrument	NMI 6/9C/324
Pattern approval mark for the indicator	NMI S...
Pattern approval mark for the load cells	NMI S...
Maximum capacity	<i>Max</i> kg # 1
Minimum capacity	<i>Min</i> kg # 1
Verification scale interval	<i>e</i> = kg # 1
Maximum subtractive tare	<i>T</i> = - kg # 2
Serial number of the instrument

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

#2 This marking is required if *T* is not equal to *Max*.

In addition, instruments carry a notice visible to the operator stating To DETERMINE THE GROSS WEIGHT OF THE PALLET, REMOVE THE PALLET FROM THE WEIGHING INSTRUMENT, ZERO THE INSTRUMENT BY PRESSING THE TARE BUTTON AND REWEIGH, or similar wording.

1.11 Software

The legally relevant software version and number are described in the approval documentation of the indicator.

1.12 Sealing Provision

Sealing provision is described in the approval documentation of the indicator.

TEST PROCEDURE No 6/9C/324

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*.

Tests

Note: The complete circular turntable is the weighing area, and hence testing (including eccentricity testing) shall be carried out using this turntable area.

In view of the special nature of the instrument, an eccentricity test shall be carried out by locating a load of 1/3 Max over a 1/4 of the turntable area.

Re-location

Verification of the instrument is required following any re-location of the instrument.

FIGURE 6/9C/324 - 1



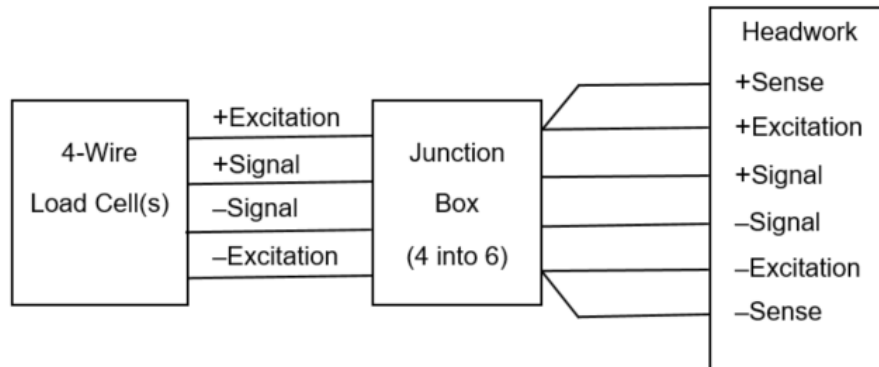
Associated Scales Model PL3000-PW Weighing Instrument

FIGURE 6/9C/324 – 2

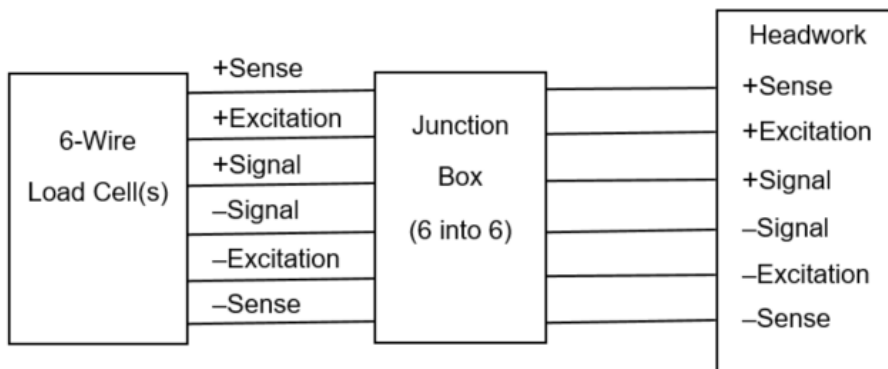


Dini Argeo Model DFWL Digital Indicator

FIGURE 6/9C/324 - 3



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



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

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