



Australian Government

Department of Industry,
Science and Resources

**National
Measurement
Institute**

36 Bradfield Road, West Lindfield NSW 2070

Supplementary Certificate of Approval

NMI S828

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.

Australasia Scales Model SWDC Digital Load Cell

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 60, *Metrological Regulation for Load Cells*, dated July 2004.

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	07/07/22

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with approval number 'NMI S828' and only by persons authorised by the submitter.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI S828' in addition to the approval number of the instrument, 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.

The values of the performance criteria (maximum number of scale intervals etc.) applicable to an instrument incorporating the pattern approved herein shall be within the limits specified herein and in any approval documentation for the other components.

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 blue ink, appearing to be 'Darryl Hines', written in a cursive style.

Darryl Hines
Manager
Policy and Regulatory Services

TECHNICAL SCHEDULE No S828

1. Description of Pattern **approved on 07/07/22**

An Australasia Scales model SWDC alloy steel body with stainless steel casing compression digital load cell of 30 000 kg maximum capacity (Figure 1 and Table 1) and approved for use with up to 4000 verification scale intervals.

These load cells shall only be used with indicators which are NMI-approved for use with compatible Australasia Scales digital load cells.

1.1 Method of Mounting

Mounting is to be in accordance with the manufacturer's instructions and as shown in Figure 3.

1.2 Markings

Each load cell is marked with the following:

Manufacturer's mark, or name written in full	Australasia Scales Pty Ltd #1
Model number	SWDC
Maximum capacity, E_{max} kg (or t)
Serial number
Pattern approval mark	NMI S828
Software version number

#1 Manufacturer may also be known as 'Sensortronic Weighing and Inspection Australasia' or 'Sensortronic' or 'SWIA'.

1.3 Table of Specifications

Specifications for the pattern are given in Table 1.

TABLE 1

Model Number	SWDC
Maximum capacity, E_{max} (kg)	30 000
Minimum dead load, E_{min} (kg)	0
Accuracy class - Classification	C
Maximum number of verification intervals, nLC	4000
Minimum value of verification interval, v_{min} (kg)	3
Minimum dead load output return value, DR (kg)	3
Output rating (resolution)	30 000 counts at E_{max}
Supply voltage (DC), (V)	10 - 18
Cable length	up to 20 m (*)
Communication	RS485
Apportionment factor, p_{LC}	0.8
Software version number	Version number: 2
Junction box	Dini Argeo model JB10QD-1
Digital indicator	Dini Argeo model 3590 series indicators (**)

- (*) The SWDC series load cells are connected to a junction box and then to the indicator. The load cell cables may be up to 20 metres in length. The connecting cable to the indicator may be up to 100 metres in length.
- (**) Or alternative NMI-approved for use with compatible Australasia Scales model SWDC digital load cells.
- (***) The software version number is marked on the nameplate or may be displayed on the connected indicator (if the indicator supports this).

FIGURE S828 – 1



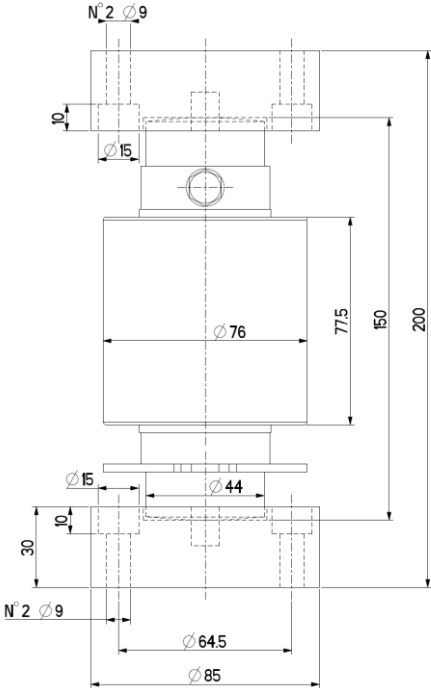
Australasia Scales Model SWDC Load Cell

FIGURE S828 – 2



Dini Argeo Model JB10QD-1 Digital Load Cell Junction Box

FIGURE S828 – 3



Typical Mounting Arrangement

~ End of Document ~