



Australian Government

**National Measurement
Institute**

Bradfield Road, West Lindfield NSW 2070

Supplementary Certificate of Approval

No S493

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

Australian Weighing Equipment Model 50K-ASCA Load Cell

submitted by Australian Weighing Equipment Pty Ltd
 50 Mandarin Street
 Fairfield East NSW 2165.

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.

CONDITIONS OF APPROVAL

This approval becomes subject to review on 1 May 2012, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked with approval number 'NMI S493' and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI S493' 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.

The National Measurement Institute reserves the right to examine any instrument or component of an instrument purporting to comply with this approval.

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.

DESCRIPTIVE ADVICE

Pattern: approved 20 April 2007

- An Australian Weighing Equipment model 50K-ASCA load cell of 22 680 kg maximum capacity.

Variant: approved 20 April 2007

1. Load cells of other models and characteristics as listed in Table 1.

Technical Schedule No S493 describes the pattern and variant 1.

FILING ADVICE

The documentation for this approval comprises:

Supplementary Certificate of Approval No S493 dated 23 April 2007
Technical Schedule No S493 dated 23 April 2007 (incl. Table 1)
Figures 1 and 2 dated 23 April 2007

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

A handwritten signature in black ink, appearing to be 'J. G. T.', located in the bottom right corner of the page.

TECHNICAL SCHEDULE No S493

Pattern: Australian Weighing Equipment Model 50K-ASCA Load Cell

Submittor: Australian Weighing Equipment Pty Ltd
50 Mandarin Street
Fairfield East NSW 2165

1. Description of Pattern

An Australian Weighing Equipment model 50K-ASCA load cell of 22 680 kg maximum capacity (Figure 1 and Table 1).

1.1 Method of Mounting

Mounting is to be in accordance with the manufacturer's instructions and as shown in Figure 2.

1.2 Markings

Each load cell is marked with the following:

Manufacturer's mark, or name written in full	Australian Weighing Equipment Pty Ltd.
Model number
Maximum capacity kg (or t)
Serial number
Pattern approval mark	S493

1.3 Table of Specifications

Specifications for the pattern are given in Table 1.

2. Description of Variant 1

Load cells of other models and characteristics as shown in Table 1.

TABLE 1

Model Number	50K-ASCA	100K-ASCA	120K-ASCA
<i>E_{max}</i> (kg)	22 680	45 360	54 430
Class	C3	C3	C3
nLC	3000	3000	3000
<i>V_{min}</i> (kg)	2.27	4.54	5.44
DR (kg)	3.78	7.56	9.07
mV/V	2	2	2
Input imp. ohms	1150	1150	1150
Voltage (V)	15	15	15
Cable length (m)	11	11	11
Number of leads (plus shield)	4	4	4

Where:

<i>E_{max}</i>	=	Maximum capacity
nLC	=	Maximum number of verification intervals
<i>V_{min}</i>	=	Minimum value of verification interval
DR	=	Minimum dead load output return value
mV/V	=	Output rating (nominal)
Input imp.	=	Input impedance (nominal)
Voltage	=	Maximum supply voltage (DC)

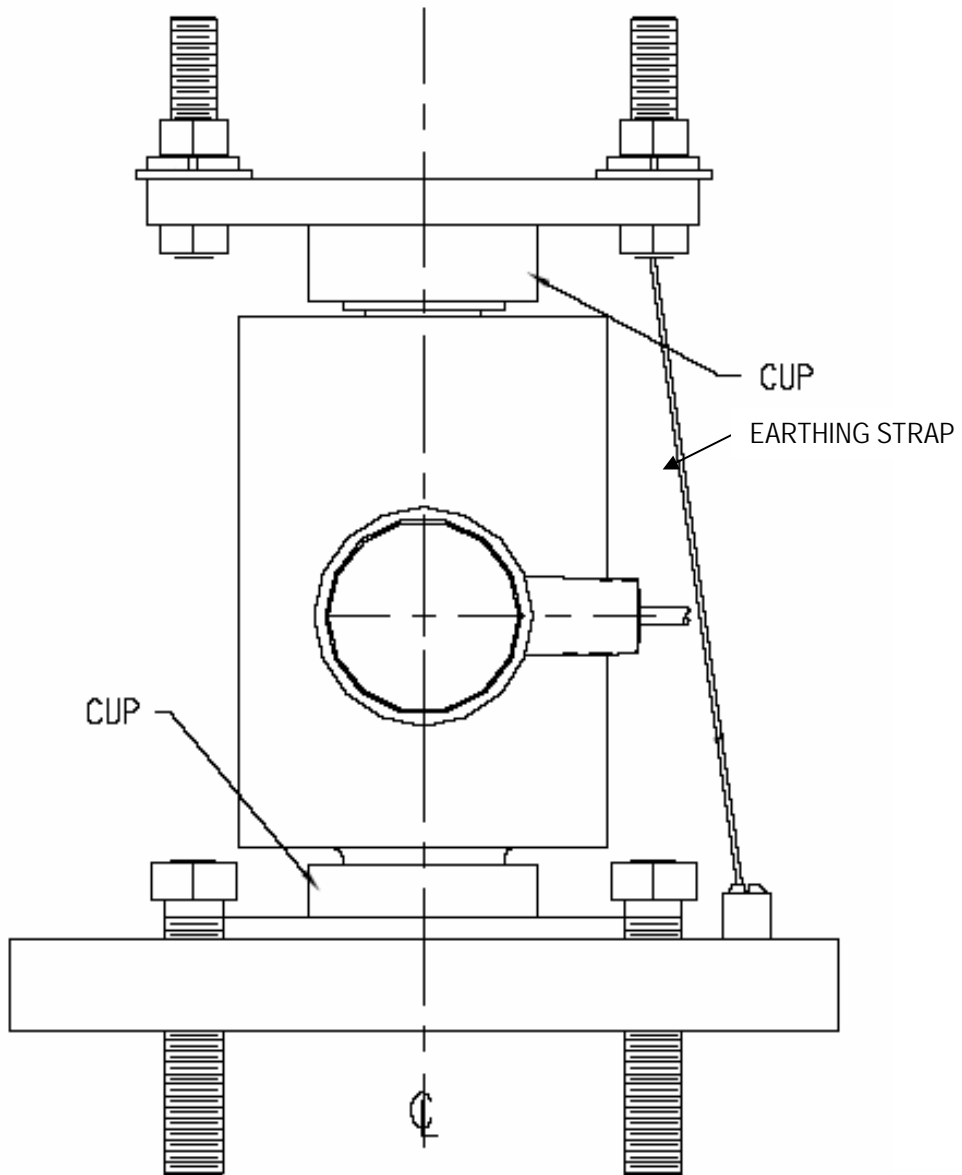
Note: The load cell markings may include the *V_{min}* value. Be aware that the values in the above Table are rounded values, whereas the marked value may be unrounded (e.g. the marking may be 2.268 kg where the value in the Table is 2.27 kg).

FIGURE S493 – 1



Australian Weighing Equipment Model 50K-ASCA Load Cell

FIGURE S493 – 2



Mounting Arrangement