



Australian Government

Department of Industry,
Science and Resources

**National
Measurement
Institute**

36 Bradfield Road, West Lindfield NSW 2070

Certificate of Approval

NMI 6/9C/333

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.

Load Sensors Model LSF1212-1.5T platform weighing instrument

submitted by Load Sensors Pty Ltd
 86 Victoria Street
 Smithfield NSW 2164

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 & variant 1 approved – certificate issued	22/01/26

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI 6/9C/333' 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 Certificates 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.

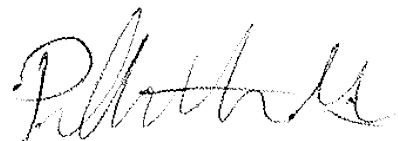
Note:

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 with analogue load cells connected parallel to each other in a junction box shall comply with 6-wire cable connection requirements between the junction box and 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*.




Phillip Mitchell

A/g Manager
Policy and Regulatory Services

TECHNICAL SCHEDULE No 6/9C/333

1. Description of Pattern**approved on 22/01/26**

A Load Sensors Model LSF1212-1.5T (Figure 1a) class  self-indicating single interval non-automatic weighing instrument of 1500 kg maximum capacity with verification scale interval of 0.5 kg and with a minimum capacity of 10 kg.

Instruments may be fitted with output sockets (output interfacing capability) for the connection of peripheral and/or auxiliary devices.

1.1 Basework

The model LSF1212-1.5T basework has the load receptor directly supported by four load cells fitted with self-aligning supporting feet. The basework has a nominal dimension of 1200 mm x 1200 mm.

If approach ramps are provided care shall be taken to ensure that these do not interfere with the platform.

1.2 Load Cells

Four ZEMIC model H8C-C3-1.0t-4B-D97 load cells of 1000 kg capacity are used and mounted as shown in Figure 2. The load cells are also described in the documentation of approval NMI S752.

1.2.1 Load Cell connection

The load cells are connected parallel to each other in a junction box (Figure 1b); and 6-wire cable connection is used between the junction box and the indicator (Figures 3a and 3b).

1.3 Indicator

A TScale model NSW digital indicator is used. The indicator is also described in the documentation of approval NMI S822.

1.4 Levelling

Where instruments are liable to be tilted (i.e. they are not installed in a levelled permanently fixed location), they are provided with adjustable feet and a visible level indicator.

The instrument is to be used in a level condition as indicated by the level indicator.

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 to be sealed as described in the approval documentation of the indicator.

1.7 Software

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

1.8 Descriptive Markings and Notices

Instruments carry the following markings:

Manufacturer's mark, or name written in full
Indication of accuracy class
Pattern approval number for the instrument
Pattern approval number for the load cells
Pattern approval number for the indicator
Maximum capacity
Minimum capacity
Verification scale interval
Tare capacity
Serial number of the instrument

Load Sensors



NMI 6/9C/333

NMI S.....

NMI S.....

Max kg #1

Min kg #1

e = kg #1

T = - kg #2

.....

#1 These markings shall be shown near the display of the result.

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

2. Description of Variant 1

approved on 22/01/26

Load Sensors model LSF series instruments as class single interval non-automatic weighing instruments in certain other capacities listed in Table 1 using approved load cells and an approved indicator in accordance with NMI General Certificate of Approval No 6B/0.

Table 1

Model No.	Maximum Capacity (<i>Max</i>) (kg)	Minimum Capacity (<i>Min</i>) (kg)	Verification Scale Interval (<i>e</i>) (kg)	Platform Size (mm x mm)
LSF1212- 1.5T	1500	10	0.5	1200 x 1200
LSF1212- 3.0T	3000	20	1	1200 x 1200
LSF1515- 1.5T	1500	10	0.5	1500 x 1500
LSF1515- 3.0T	3000	20	1	1500 x 1500
LSF1515- 5.0T	5000	40	2	1500 x 1500

TEST PROCEDURE No 6/9C/333

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.

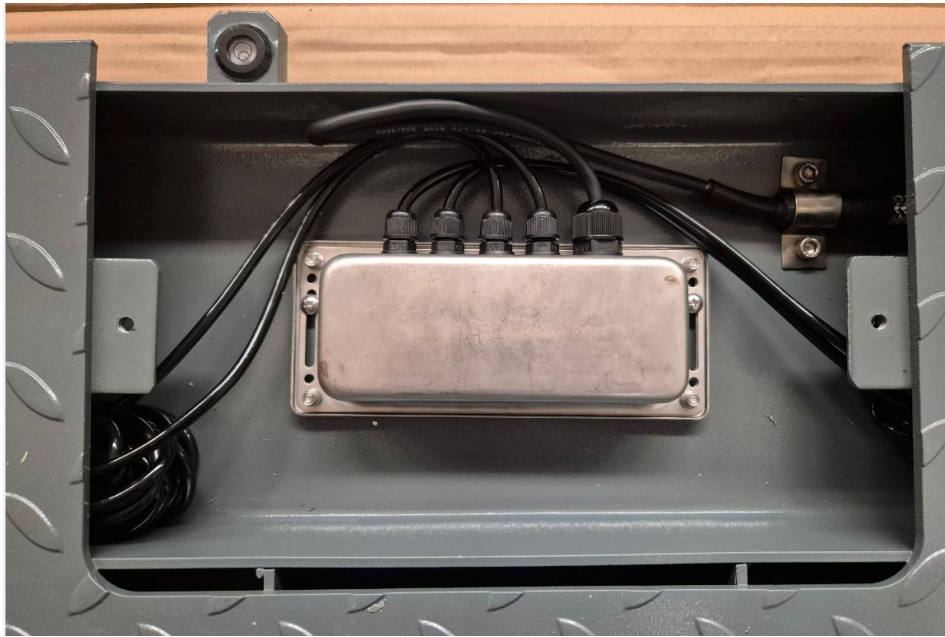
Maximum Permissible Errors

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

FIGURE 6/9C/333 – 1



(a) Load Sensor Model LSF1212-1.5T Weighing Instrument (Pattern)



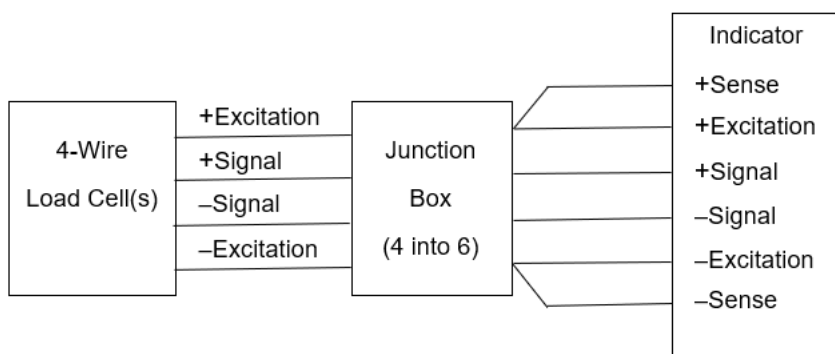
(b) Junction box

FIGURE 6/9C/331 – 2

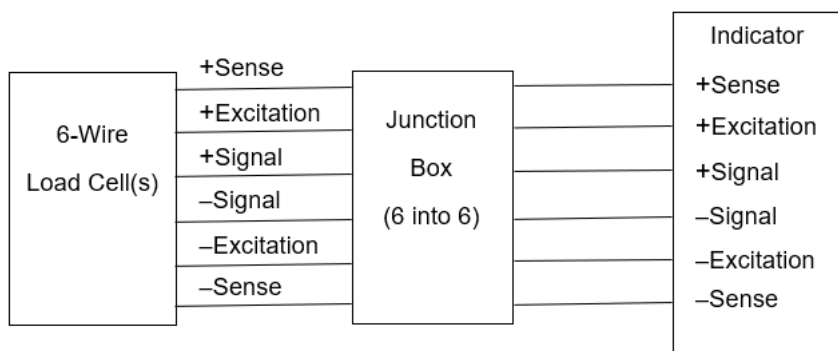


Load cell mounting location

FIGURE 6/9C/333 – 3



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



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

~ End of Document ~