



**Australian Government**  

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**National Measurement  
Institute**

12 Lyonpark Road, North Ryde NSW 2113

**Supplementary Certificate of Approval**  
**No S446**

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

A & D Model LCM13T001 Load Cell

submitted by A & D Mercury Pty Ltd  
13 Dew Street  
Thebarton SA 5031.

**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.

**CONDITIONS OF APPROVAL**

This approval becomes subject to review on 1 October 2009, and then every 5 years thereafter.

Instruments purporting to comply with this approval shall be marked with approval number 'NMI S446' and only by persons authorised by the submitter.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI S446' 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.

#### DESCRIPTIVE ADVICE

**Pattern:** approved 17 September 2004

- An A & D model LCM13T001 load cell of 1000 kg maximum capacity.

**Variant:** approved 17 September 2004

1. Certain other models and capacities as listed in Table 1.

Technical Schedule No S446 describes the pattern and variant 1.

#### FILING ADVICE

The documentation for this approval comprises:

Certificate of Approval No S446 dated 25 October 2004  
Technical Schedule No S446 dated 25 October 2004 (incl. Table 1)  
Figures 1 and 2 dated 25 October 2004

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.', is located in the bottom right corner of the page.

TECHNICAL SCHEDULE No S446

**Pattern:** A & D Model LCM13T001 Load Cell

**Submittor:** A & D Mercury Pty Ltd  
13 Dew Street  
Thebarton SA 5031

**1. Description of Pattern**

An A & D model LCM13T001 load cell of 1000 kg maximum capacity (Figure 1 and Table 1) approved for use with up to 3000 verification intervals.

**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	A & D Company Limited
Model number	.....
Serial number	.....
Pattern approval mark	NMI S446
Maximum capacity $E_{max}$	..... kg

**1.3 Table of Specifications**

Specifications for the pattern are given in Table 1.

**2. Description of Variant 1**

Certain other models and capacities as listed in Table 1.

TABLE 1

Type: A & D LCM13T Series, in models LCM13T# where # is the value listed below:

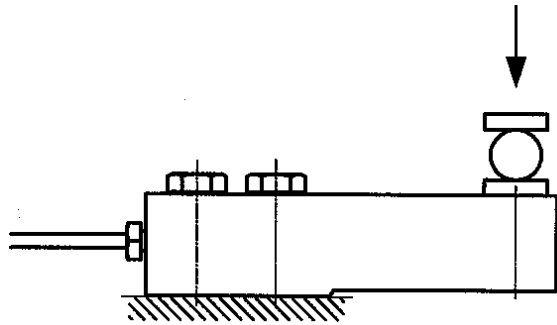
Model LCM13T:		001	002	003	005
Maximum capacity, $E_{max}$	kg	1000	2000	3000	5000
Accuracy class		C	C	C	C
Maximum number of verification intervals		3000	3000	3000	3000
Minimum value of verification interval, $v_{min}$	kg	0.1	0.2	0.3	0.5
Minimum dead load output return value (DR)	kg	0.1	0.2	0.3	0.5
Output rating (nominal)	mV/V	2	2	2	2
Input impedance (nominal)	ohm	350	350	350	350
Supply voltage (AC or DC) Max.	V	15	15	15	15
Cable length ( $\pm 0.1$ m)	m	3	3	3	3
Number of leads (plus shield)		4	4	4	4

FIGURE S446 – 1

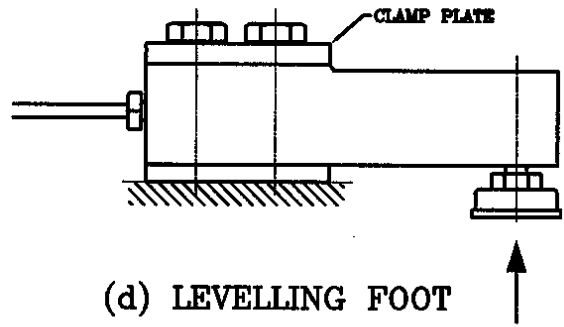


A & D Model LCM13T001 Load Cell

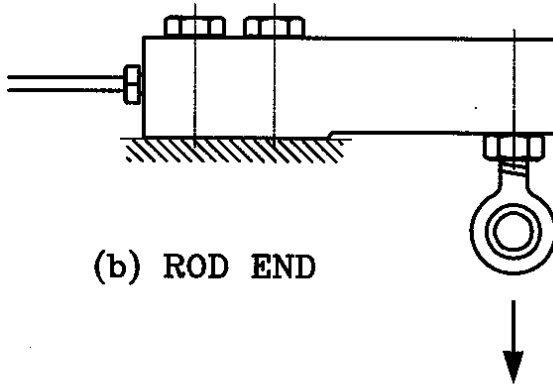
FIGURE S446 - 2



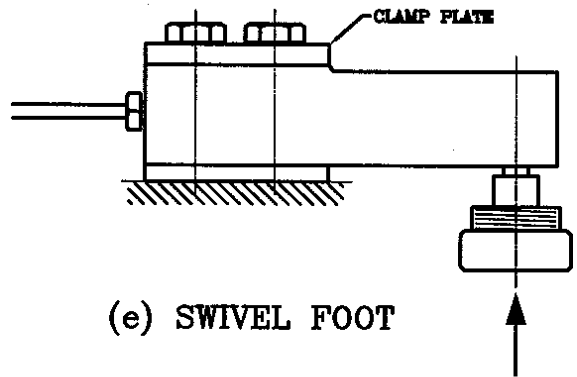
(a) BALL AND CUPS



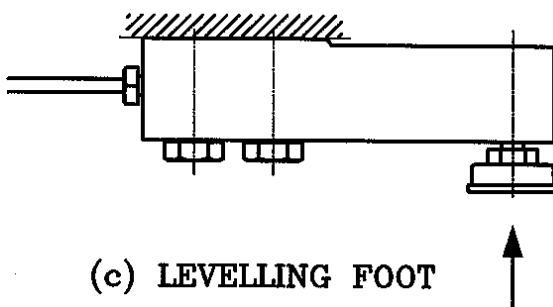
(d) LEVELLING FOOT



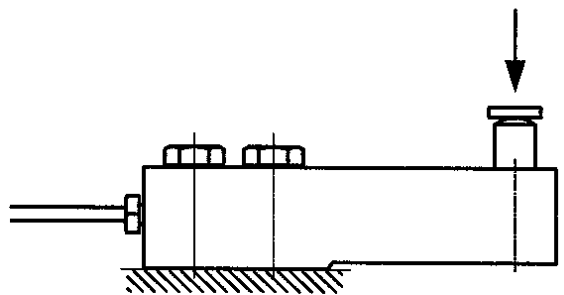
(b) ROD END



(e) SWIVEL FOOT



(c) LEVELLING FOOT



(f) LOAD BUTTON