Australian Government
National Measurement Institute
Bradfield Road, West Lindfield NSW 2070

Supplementary Certificate of Approval

NMI S155B

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.

Kelba Model KA1000 C3 Load Cell

submitted by Kelba (Australia) Pty Ltd
7 Leonard Street
Hornsby NSW 2077

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 becomes subject to review on **1/12/19**, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern & variant 1 approved – interim certificate issued	13/11/97
1	Pattern & variant 1 approved – certificate issued	30/12/97
2	Variant 2 approved – interim certificate issued	22/10/98
3	Variant 2 approved – certificate issued	31/03/99
4	Variant 3 approved – interim certificate issued	13/11/97
5	Variant 3 approved – certificate issued	15/02/02
6	Pattern & variants 1 to 3 reviewed– notification of change issued	28/02/03
7	Pattern & variants 1 to 3 amended (cable length) – notification of change issued	17/02/05
8	Pattern & variants 1 to 3 reviewed– notification of change issued	5/03/08
9	Pattern & variants 1 to 3 reviewed & updated – certificate issued	7/8/14

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with pattern approval number 'NMI (or NSC) S155B' and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI (or NSC) S155B' in addition to the approval number of the instrument, and only by persons authorised by the submittor.

It is the submittor'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.

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

Dr A Rawlinson

TECHNICAL SCHEDULE No S155B

1. Description of Pattern approved on 13/11/97

A Kelba model KA1000 C3 load cell of 1000 kg maximum capacity (Figure 1) approved for use with up to 3000 verification scale intervals and with other specifications as listed in Table 1 below.

1.1 Method of Mounting

Mounting is to be in accordance with the manufacturer's instructions and as shown in Figure 2. Other mounting methods may be acceptable with written authority of the National Measurement Institute.

1.2 Markings

Each load cell is marked with the following, in the form shown at right:

Manufacturer's mark, or name written in full	……
Model number	……
Serial number	……
Pattern approval mark	NMI (or NSC) No S155B
Maximum capacity	E_{max} 1000 kg

2. Description of Variant 1 approved on 13/11/97

The model KA1000 C3-P which has the same specifications as the pattern (Table 1) but has different mounting hole spacing.

3. Description of Variant 2 approved on 22/10/98

The model KL1000 C3 load cell of 1000 kg maximum capacity (Figure 3) approved for use with specifications as listed in Table 2 below.

Mounting is to be in accordance with the manufacturer's instructions and as shown in Figure 4. Other mounting methods may be acceptable with written authority of the National Measurement Institute.

4. Description of Variant 3 approved on 13/12/01

The model KA2500 C3 and model KA5000 C3 approved for use with specifications as listed in Table 3 below.

TABLE 1

Type: Kelba KA1000 C3/KA1000 C3-P

Maximum capacity, E_{max}	1000 kg
Accuracy class	C
Maximum number of verification scale intervals	3000
Minimum value of verification scale interval	0.092 kg
Minimum dead load output return value (DR)	0.07 kg
Output rating (nominal)	2.2 mV/V
Input impedance (nominal)	350 Ω
Supply voltage (AC or DC)	5 to 15 V
Cable length (±0.1 m, in 0.5 m increments)	0.5 to 10 m
Number of leads (plus shield)	4

TABLE 2

Type: Kelba KL1000 C3

Maximum capacity, E_{max}	1000 kg
Accuracy class	C
Maximum number of verification scale intervals	3000
Minimum value of verification scale interval	0.095 kg
Minimum dead load output return value (DR)	0.110 kg
Output rating (nominal)	1.5 mV/V
Input impedance (nominal)	380 Ω
Supply voltage (AC or DC)	5 to 15 V
Cable length (±0.1 m, in 0.5 m increments)	0.5 to 10 m
Number of leads (plus shield)	4

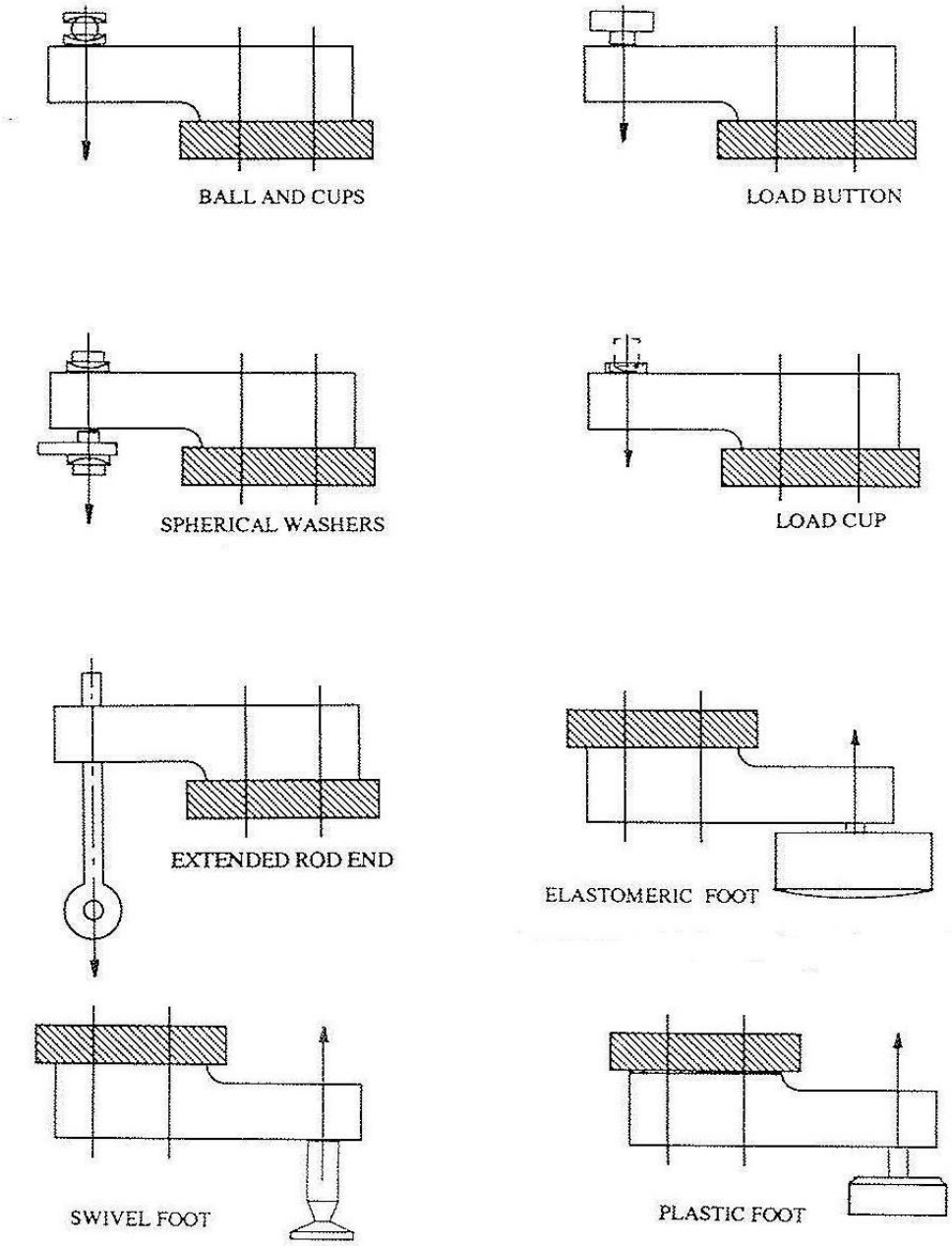
TABLE 3

Type: Kelba	KA2500 C3	KA5000 C3
Maximum capacity, E_{max}	2500 kg	5000 kg
Accuracy class	C	
Maximum number of verification scale intervals	3000	
Minimum value of verification scale interval	0.23 kg	0.46
Minimum dead load output return value (DR)	0.175 kg	0.35 kg
Output rating (nominal)	2.2 mV/V	
Input impedance (nominal)	350 Ω	
Supply voltage (AC or DC)	5 to 15 V	
Cable length (±0.1 m, in 0.5 m increments)	0.5 to 10 m	
Number of leads (plus shield)	4	

FIGURE S155B – 1

Kelba Model KA1000 C3 Load Cell

FIGURE S155B – 2

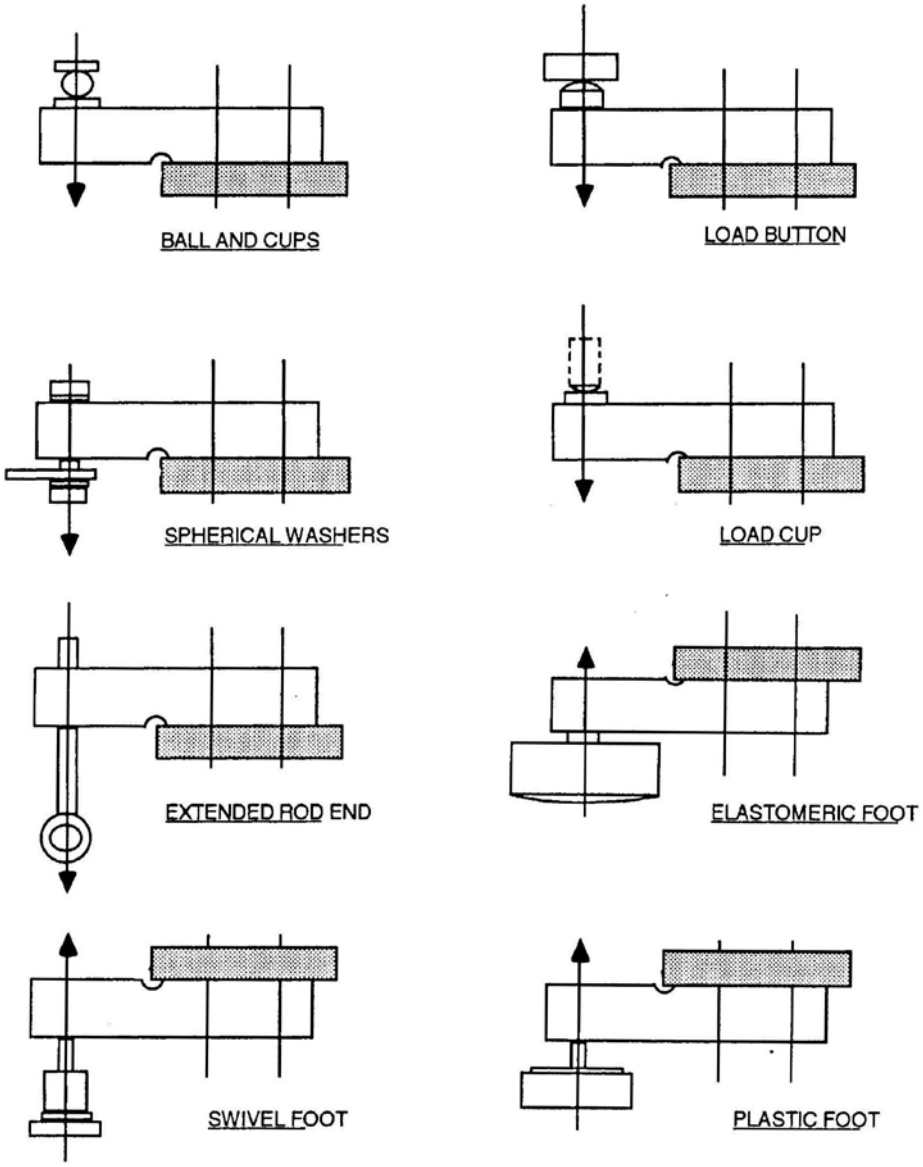


Approved Mounting Methods – Model KA1000 C3/KA1000 C3-P

FIGURE S155B – 3

Kelba Model KL1000 C3 Load Cell

FIGURE S155B – 4



Approved Mounting Methods – Model KL1000 C3

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