



Australian Government
Department of Industry,
Science and Resources

**National
Measurement
Institute**

36 Bradfield Road, West Lindfield NSW 2070

Supplementary Certificate of Approval

NMI S561

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.

ZEMIC Model BM14C-C3-30t-13B6 Load Cell

submitted by S.R.O. Technology Pty. Limited
Unit 14, 70 Holbeche Road
Arndell Park NSW 2148

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	19/04/12
1	Pattern amended (submitor name) & review date removed – certificate issued	10/03/23

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with approval number 'NMI S561' and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI S561' 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.

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*.



Darryl Hines
Manager
Policy and Regulatory
Services

TECHNICAL SCHEDULE No S561

1. Description of Pattern **approved on 19/04/12**

A ZEMIC model BM14C-C3-30t-13B6 load cell of 30 000 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 Figures 2 to 4. Note that the profile of the load cells shown in some Figures is different to the actual cell profile.

1.2 Markings

Each load cell is marked with the following:

Manufacturer's mark, or name written in full	ZEMIC
Model number
Maximum capacity, E_{max} kg (or t)
Serial number
Pattern approval mark	NMI No S561

1.3 Table of Specifications

Specifications for the pattern are given in Table 1.

2. Description of Variant 1 **approved on 19/04/12**

Certain other models of the ZEMIC BM14C-C3 series and with capacities and characteristics as listed in Table 1.

Type: ZEMIC BM14C-C3-#-13B6 series as listed below, where # in the model number represents the capacity (E_{max}) in tonnes, e.g. the pattern, model BM14C-C3-30t-13B6, is of 30 t (30 000 kg) capacity.

TABLE 1

Model number	#=10t	#=20t	#=25t	#=30t	#=40t	#=50t
E_{max} (kg)	10 000	20 000	25 000	30 000	40 000	50 000
Class	C3	C3	C3	C3	C3	C3
nLC	3000	3000	3000	3000	3000	3000
V_{min} (kg)	1	2	2.5	3	4	5
DR (kg)	1.67	3.33	4.17	5	6.67	8.33
mV/V	2	2	2	2	2	2
Input imp. ohms	700	700	700	700	700	700
Supply voltage (V)	18	18	18	18	18	18
Cable length (m)	13	13	13	13	13	13
Number of leads (plus shield)	6	6	6	6	6	6

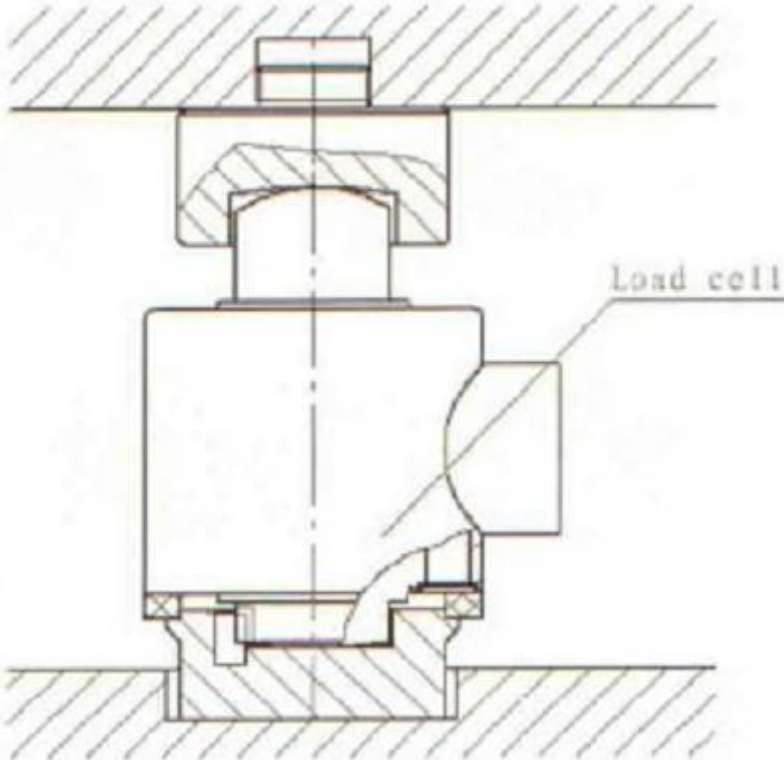
Where:	E_{max}	=	Maximum capacity
	nLC	=	Maximum number of verification intervals
	V_{min}	=	Minimum value of verification interval
	DR	=	Minimum dead load output return value
	mV/V	=	Output rating (nominal)
	Input imp.	=	Input impedance (nominal)
	Voltage	=	Maximum supply voltage (DC)

FIGURE S561 – 1



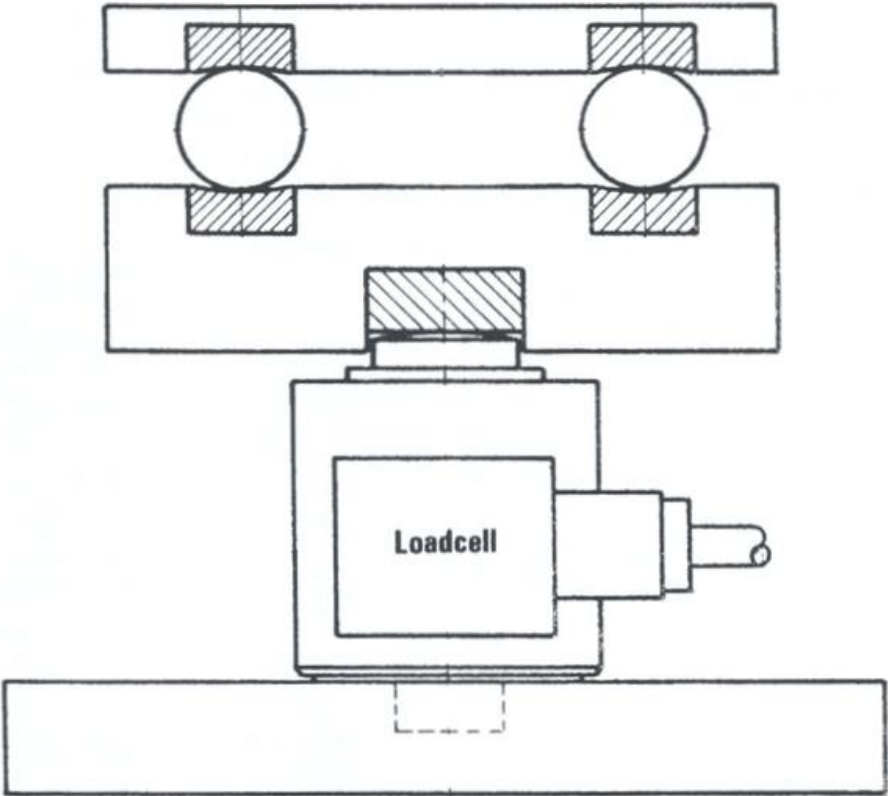
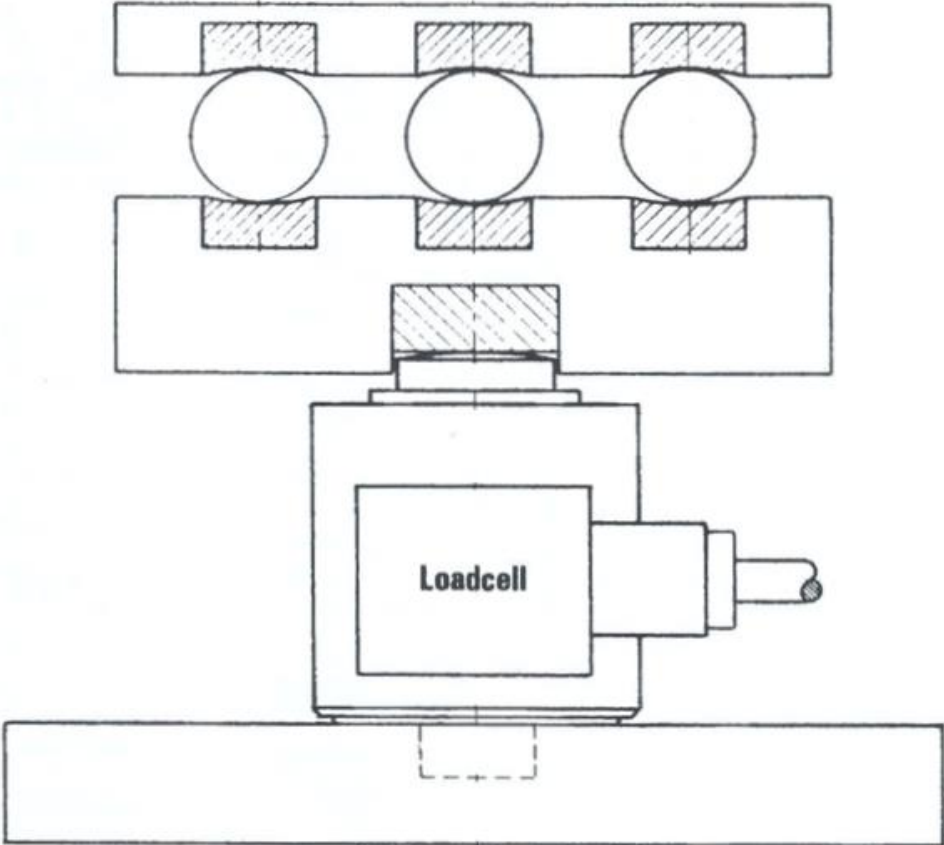
ZEMIC Model BM14C-C3-30t-13B6 Load Cell

FIGURE S561 – 2



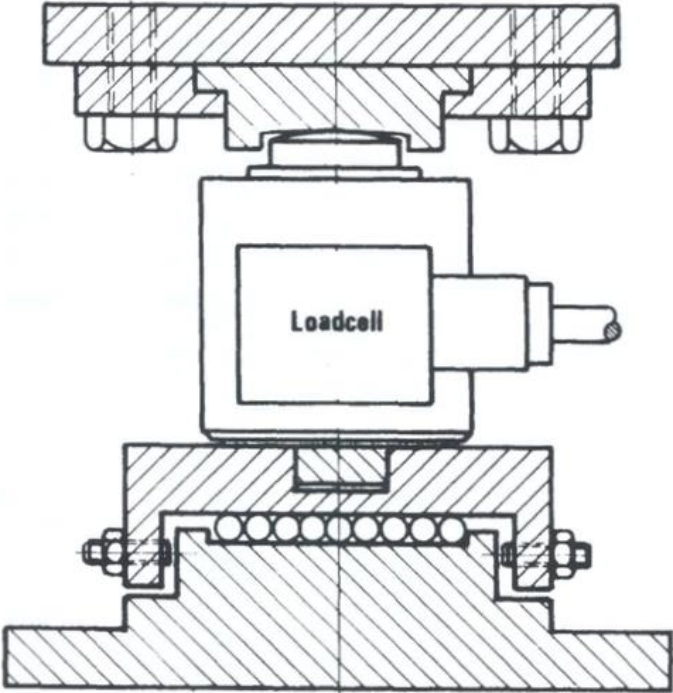
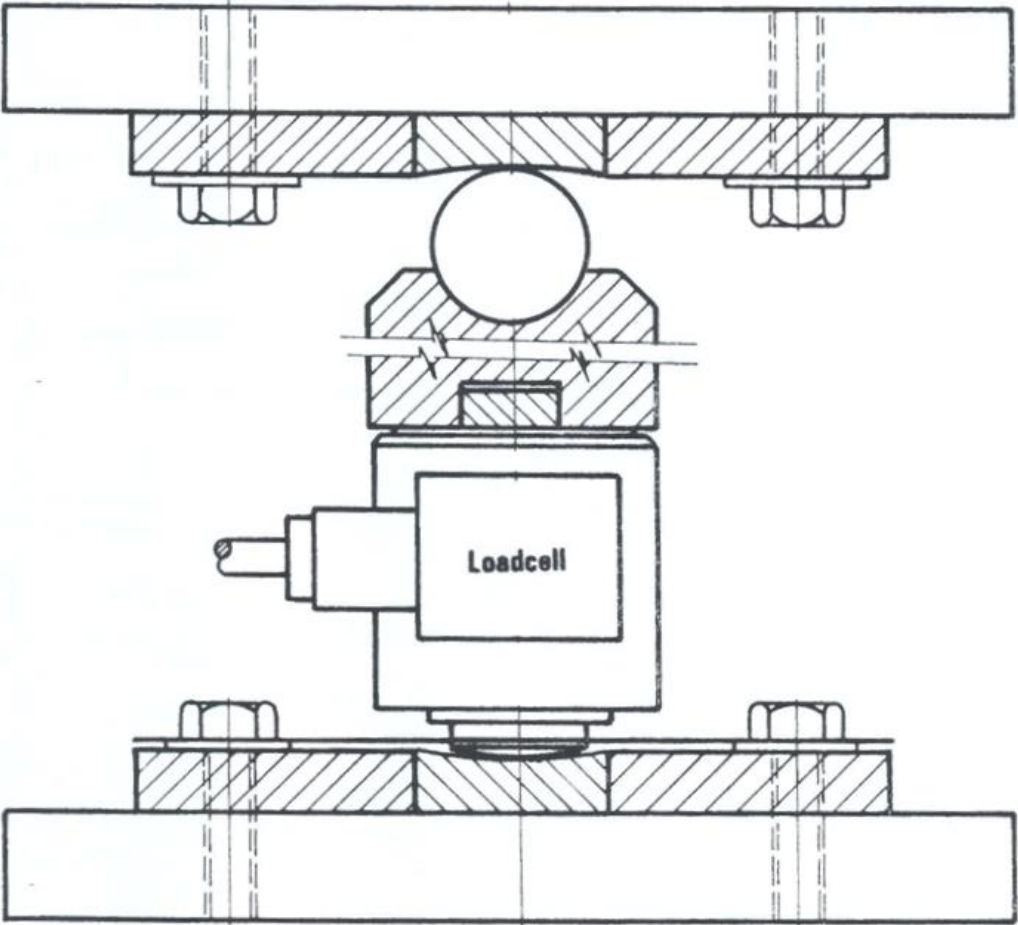
A Typical Mounting Arrangement

FIGURE S561 – 3



Some Alternative Mounting Arrangements

FIGURE S561 – 4



More Alternative Mounting Arrangements