Australian Government
Department of Industry, Innovation and Science

National Measurement Institute

Supplementary Certificate of Approval

NMI S746

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.

Keli Electric Model QS-A Load Cell

submitted by Australian Ag Advisory & Management Pty Ltd
43 Norman Drive
Yeppoon QLD 4703

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 1/07/22, and then every 5 years thereafter.

DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern and variant 1 – approved – certificate issued	2/06/17

CONDITIONS OF APPROVAL

General

Instruments purporting to comply with this approval shall be marked with approval number ‘NMI S746’ and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked ‘NMI S746’ 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*.

Dr A Rawlinson

TECHNICAL SCHEDULE No S746

1. Description of Pattern approved on 2/06/17

A Keli Electric model QS-A alloy steel double ended shear beam load cell of 10 000 kg maximum capacity (Figure 1 and Table 1) and approved for use with up to 3000 verification scale 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	Keli Electric
Model number	……..
Maximum capacity, E_{max}	…….. kg (or t)
Serial number	……..
Pattern approval mark	NMI S746

1.3 Table of Specifications

Specifications for the pattern are given in Table 1.

2. Description of Variant 1 approved on 2/06/17

Certain other capacities of the Keli QS-A series are listed in Table 1.

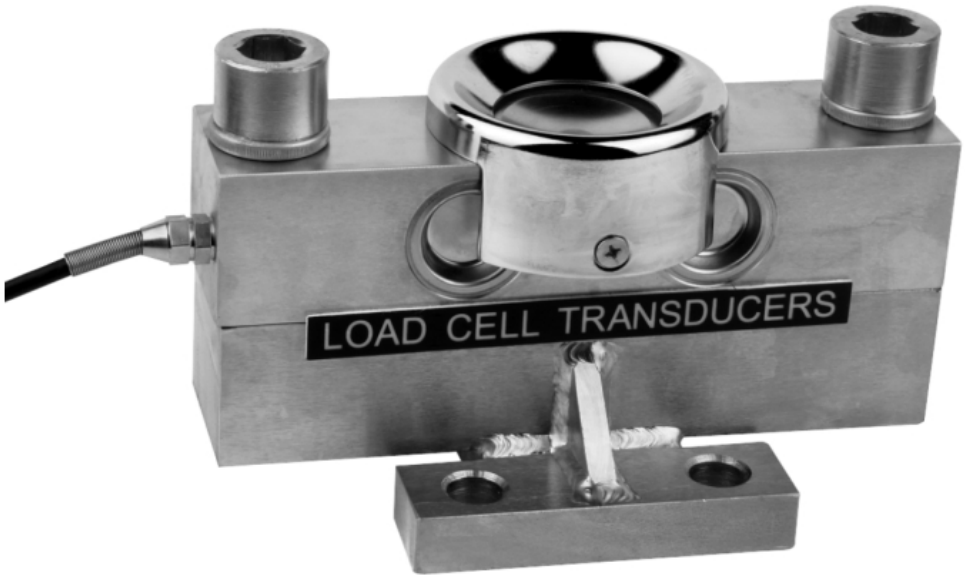
TABLE 1

Model Number	QS-A						
E_{max} (kg)	10 000	15 000	20 000	25 000	30 000	40 000	50 000
Class	C	C	C	C	C	C	C
nLC	3000	3000	3000	3000	3000	3000	3000
V_{min} (kg)	1	1.5	2	2.5	3	4	5
DR (kg)	1.67	2.5	3.33	4.17	5	6.67	8.33
Cable length (m)	8	10	10, 12	12, 15	12, 16	16	16
mV/V	2						
Input imp (Ω)	750						
Voltage (V DC)	15						
Number of leads	4 (plus shield)						

Where:

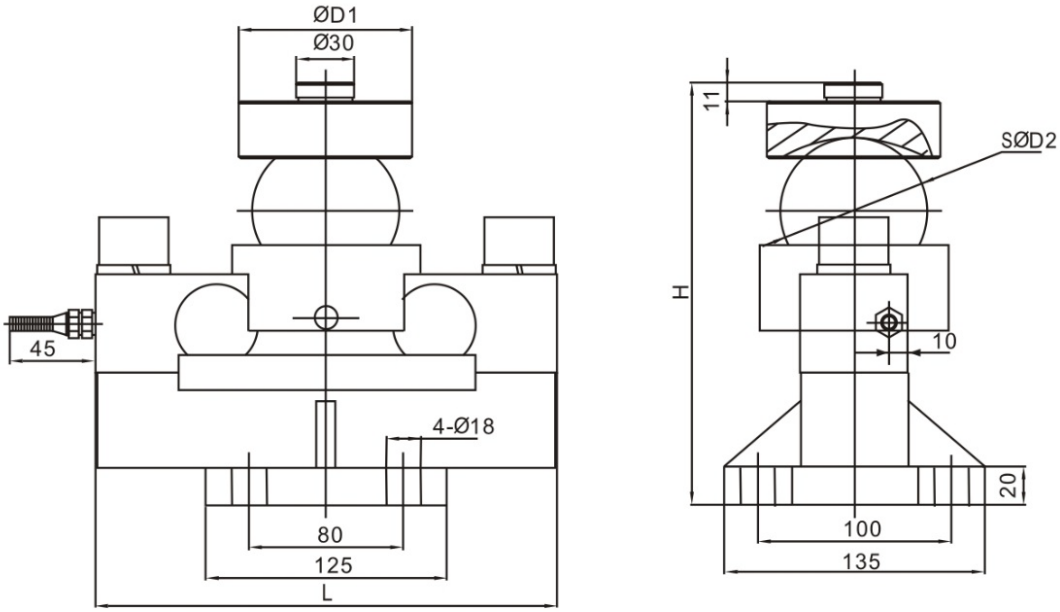
E_{max}	=	Maximum capacity
E_{min}	=	Minimum dead load
nLC	=	Maximum number of verification intervals
V_{min}	=	Minimum value of verification interval
DR	=	Minimum dead load output return value
mV/V	=	Output rating (nominal)
Input imp.	=	Input impedance (nominal)
Voltage	=	Maximum supply voltage (AC/DC)

FIGURE S746 – 1



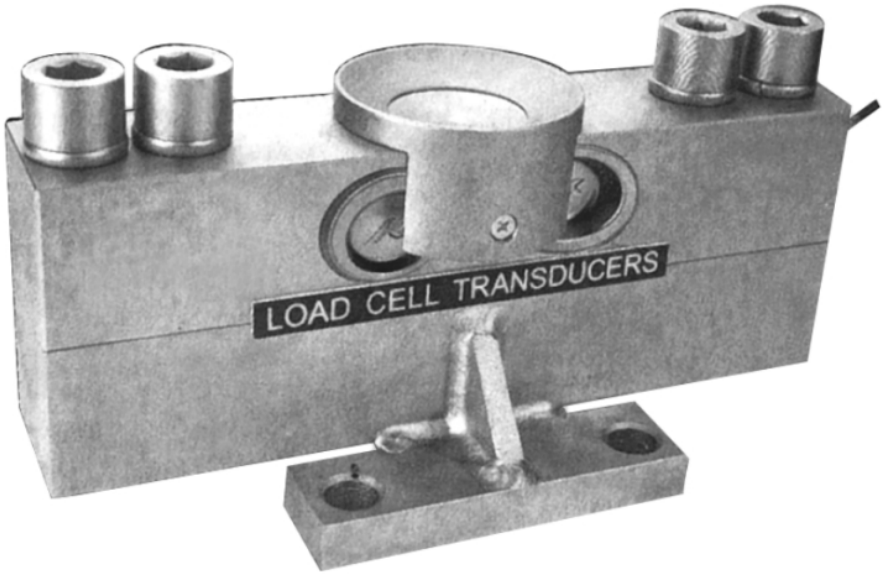
Keli Electric Model QS-A Series Load Cell
(Pattern and Variant 1 - 10 000kg to 40 000 kg)

FIGURE S746 – 2



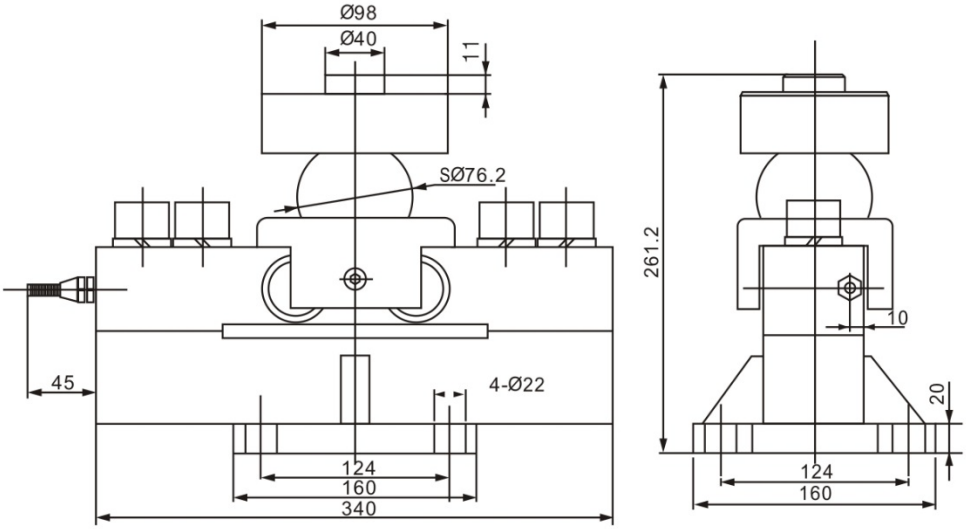
Typical Mounting Arrangement

FIGURE S746 – 3



Keli Electric Model QS-A Series Load Cell
(Variant 1 – 50 000 kg)

FIGURE S746 – 4



Typical Mounting Arrangement
(Variant 1 – 50 000 kg)

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