

# National Measurement Institute

# Supplementary Certificate of Approval NMI S752

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 H8C-C3-100kg-4B Load Cell

submitted by Zhonghang Electronic Measuring Instruments Co. Ltd

166 West Avenue Chang'an District

Xi'an City

Shaanxi Province 701006

China

**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 1/11/22, and then every 5 years thereafter.

#### DOCUMENT HISTORY

Rev	Reason/Details	Date
0	Pattern and variants 1 to 2 approved – certificate issued	13/10/17

#### CONDITIONS OF APPROVAL

#### General

Instruments purporting to comply with this approval shall be marked with approval number 'NMI S752' and only by persons authorised by the submittor.

Instruments incorporating a component purporting to comply with this approval shall be marked 'NMI S752' 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** 

#### TECHNICAL SCHEDULE No S752

# 1. Description of Pattern

### approved on 13/10/17

A ZEMIC model H8C-C3-100kg-4B bending beam load cell of 100 kg maximum capacity (Figure 1a 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.

# 1.2 Markings

Each load cell is marked with the following:

Manufacturer's mark, or name written in full ZEMIC Model number ......... kg (or t)

Serial number .......

Pattern approval mark NMI S752

### 1.3 Table of Specifications

Specifications for the pattern are given in Table 1.

### 2. Description of Variant 1

#### approved on 13/10/17

Certain other models of the ZEMIC H8C bending beam series and with capacities and characteristics as listed in Table 1.

Type: ZEMIC H8C-C3-#-4B series as listed below, where # in the model number represents the capacity (*Emax*), e.g. the pattern model H8C-C3-100kg-4B is of 100 kg maximum capacity.

<b>TABLE</b>	1
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Model number  Emax (kg)  Class nLC  Vmin (kg)  DR (kg)  mV/V  Input imp. ohms  Supply voltage (V)  Cable length (m)  Number of leads	#=100kg	#=200kg	#=250kg	#=300kg
	100	200	250	300
	C	C	C	C
	3000	3000	3000	3000
	0.01	0.02	0.025	0.03
	0.01	0.02	0.025	0.03
	3	3	3	3
	350	350	350	350
	18	18	18	18
	4	4	4	4
Number of leads (plus shield)	4	4	4	4

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)

# 3. Description of Variant 2

# approved on 13/10/17

Certain models of the ZEMIC H8C shear beam series (Figure 1b) and with capacities and characteristics as listed in Tables 2a and 2b.

Type: ZEMIC H8C-C3-#-4B series as listed below, where # in the model number represents the capacity (*Emax*), e.g. the pattern model H8C-C3-1.0t-4B is of 1000 kg capacity.

TΑ	BL	.E	2a
IΑ	$^{BL}$	.E	28

Model number	#=500kg	#=1.0t	#=1.5t	#=2.0t
Emax (kg)	500	1000	1500	2000
Class	С	С	С	С
nLC	3000	3000	3000	3000
Vmin (kg)	0.05	0.1	0.15	0.2
DR (kg)	0.05	0.1	0.15	0.2
mV/V	3	3	3	3
Input imp. ohms	350	350	350	350
Supply voltage (V)	18	18	18	18
Cable length (m)	4	4	4	4
Number of leads (plus shield)	4	4	4	4

## TABLE 2b

Model number	#=2.5t	#=3t	#=5t	#=10t
Emax (kg)	2500	3000	5000	10 000
Class	С	С	С	С
nLC	3000	3000	3000	3000
Vmin (kg)	0.25	0.3	0.5	1
DR (kg)	0.25	0.3	0.5	1
mV/V	3	3	3	3
Input imp. ohms	350	350	350	350
Supply voltage (V)	18	18	18	18
Cable length (m)	4	4	4	4
Number of leads	4	4	4	4

(plus shield)

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 S752 - 1



(a) ZEMIC Model H8C Series Bending Beam Load Cell



(b) ZEMIC Model H8C Series Shear Beam Load Cell



A Typical Mounting Arrangement ~ End of Document ~