

## Test certificate

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Issued by NMi Certin B.V.

Hugo de Grootplein 1 3314 EG Dordrecht The Netherlands

In accordance

with

Paragraph 8.1 of the European Standard on Metrological aspects of non-automatic

weighing instruments EN 45501:1992/AC:1993 and by application of the OIML

International Recommendation R 60 (Edition 2000).

Manufacturer Zhonghang Electronic Measuring Instruments Co., Ltd.(ZEMIC)

XinYuan Rd. North Zone of EDZ, Hanzhong,

723000 Shaanxi

China

In respect of A shear beam load cell, with strain gauges, tested as a part of a weighing

instrument.

Manufacturer + : Zhonghang Electronic Measuring Instruments Co., Ltd.

(ZEMIC)

Type : BM8H-Cx-xx-xx Series

Characteristics  $E_{max}$  : 2000 kg up to and including 5000kg

Accuracy class : C

In the description number TC8104 revision 0 further characteristics are described

Description and The load cell is described in the description number TC8104 revision 0 and documentation documented in the documentation folder TC8104-1, appertaining to this

test certificate.

Remarks Summary of the test involved: see Appendix number TC8104 revision 0.

25 April 2012

C. Oosterman Head Certification Board

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### Description

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#### 1 General information about the load cell

All properties of the load cell, whether mentioned or not, may not be in conflict with the standard mentioned in the test certificate.

### 1.1 Essential parts

Description	Drawing number	Rev.	Remarks
BM8H Load Cells Catalogue for using	8104/0-01	0	Mechanical/ Electrical

### Cable:

- The load cell is provided with a 4-wire system:
  - The cable length is mentioned on the load cell, see chapter "Naming example" in the BM8H Load cells Catalogue for using;
  - The cable length shall not be modified.
- The load cell is provided with a 6-wire system (="Remote-sensing"):
  - The cable length is not limited.
- The cable should be a shielded cable, the shield is not connected to the load cell.

#### 1.2 Essential characteristics

Туре		BM8H-Cx-xx-xx Series	
Load cell construction		Shear beam	
Humidity classification		СН	
Fraction p <sub>Ic</sub>		0,7	
Temperature range		-10 °C / +40 °C	
Maximum capacity	Emax	2000 kg up to and including 5000 kg	
Accuracy class		С	
Maximum number of load cell verification intervals	n <sub>max</sub>	3000	
Ratio of minimum LC verification interval	$Y = E_{max} / v_{min}$	15000	
Ratio of minimum dead load output return	$Z = E_{max} / 2*DR$	3000	

The characteristics for  $n_{\text{max}}$  and Y can be reduced separately. Z is proportional or equal to  $n_{\text{max}}$ 



### Description

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Each produced load cell is supplied with information about its characteristics.

Minimum dead load : 0 kg

Safe overload : 150% of  $E_{\text{max}}$ 

Rated Output:  $2 \text{ mV/V} \pm 0,02 \text{ mV/V}$ Input impedance:  $1000 \Omega \pm 10 \Omega$ Output impedance:  $1004 \Omega \pm 5 \Omega$ Recommended excitation: 5-12 V DC/ACExcitation maximum: 18 V DC/ACTransducer material: Stainless steel

Atmospheric protection : Hermetically welded

### 1.3 Essential shapes

The load cell is built according to drawing:

- "BM8H Load Cells Catalogue for using", drawing number 8104/0-01.

The data plate is secured against removal by sealing or will be destroyed when removed. The data plate mentions at least the information and markings as described in the OIML R60 document. In the countries where it is mandatory the load cell should bear this test certificate number: TC8104.

### Securing:

The connecting cable of the load cell or the junction box is provided with possibility to seal.



# Appendix

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### Tests performed for this test certificate:

Test	Institute	type, version, remarks
Temperature test and repeatability (20, 40, -10 and 20 °C)	NMi Certin B.V.	BM8H-C3-2T-6B
Temperature effect on minimum dead load output (20, 40, -10 and 20 °C)	NMi Certin B.V.	BM8H-C3-2T-6B
Creep (20, 40 and –10 °C)	NMi Certin B.V.	BM8H-C3-2T-6B
Minimum dead load output return (20, 40 and –10 °C)	NMi Certin B.V.	BM8H-C3-2T-6B
Barometric pressure effects at room temperature	NMi Certin B.V.	BM8H-C3-2T-6B
Damp heat, cyclic: marked CH (or not marked)	NMi Certin B.V.	BM8H-C3-2T-6B