

Issued by NMI Certin B.V.

In accordance with WELMEC 8.8 Issue 2, Paragraph 8.1 of EN 45501:1992/AC:1993, OIML R60:2000, WELMEC 2.4 Issue 2.

Producer Zhonghang Electronic Measuring Instruments Co., Ltd.(ZEMIC)  
XinYuan Rd. North Zone of EDZ, Hanzhong,  
723000 Shaanxi  
China

Measuring instrument A **shear beam load cell**, with strain gauges, tested as a part of a weighing instrument.

Brand : Zhonghang Electronic Measuring Instruments Co., Ltd. (ZEMIC)

Designation : BM8H-Cx-xx-xx-xx Series

Further properties are described in the annexes:  
- Description TC8104 revision 2;  
- Documentation folder TC8104-2.

An overview of performed tests is given in the annex:  
- Description TC8104 revision 2.

Remarks This revision replaces the earlier versions, except for its documentation folder.

Issuing Authority

**NMI Certin B.V.**  
10 October 2013

  
C. Oosterman  
Head Certification Board

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# Description

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Project number 13200254  
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## 1 General information about the load cell

All properties of the load cell, whether mentioned or not, shall not be in conflict with the standards mentioned in this certificate.

This certificate is the positive result of the applied voluntary, modular approach, for a component of a measuring instrument, as described in WELMEC guide 8.8. The complete measuring system must be covered by an EC type-examination Certificate.

### 1.1 Essential parts

Number	Pages	Description	Remark
8104/1-01	5	BM8H Load Cells Catalogue For Using	Mechanical / Electrical

Cable:

- The load cell is provided with a 4-wire system:
  - The cable length is mentioned in the accompanying load cell document / on the label;
  - 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

Maximum capacity ( $E_{max}$ )	500 kg up to and including 5000 kg
Minimum dead load	0 kg
Accuracy Class	C
Rated Output	2,0 mV/V $\pm$ 0,002 mV/V
Maximum number of load cell intervals (n)	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
Input impedance	1000 $\Omega \pm 10 \Omega$
Temperature range	-10 °C / +40 °C
Fraction $p_{LC}$	0,7
Humidity Class	CH
Safe overload	150% of $E_{max}$
Output impedance	1000 $\Omega \pm 10 \Omega$
Recommended excitation	5 - 12 V AC/DC
Excitation maximum	18 V AC/DC
Transducer material	Stainless steel
Atmospheric protection	Hermetically welded

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

Each produced load cell is provided with an accompanying document with information about its characteristics.

## 1.3 Essential shapes

The load cell is built according to drawing:

- BM8H Load Cells Catalogue for using, drawing number 8104/1-01.

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 recommendation.

In the countries where it is mandatory the load cell should bear this test certificate number: TC8104.

## 2 Seals

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



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### **3 Conditions for conformity assessment**

The compatibility of load cells and indicator is established by the manufacturer by means of the compatibility of modules form, contained in WELMEC 2 Issue 5 Section 11, at the time of EC verification or declaration of EC conformity of type.

Other parties may use this Parts Certificate without the written permission of the producer.

### **4 Test reports, evaluation reports and pattern evaluation reports**

An overview of performed tests is given in the reports:

- No. NMI-12200100-05 dated 25 April 2012 that includes 52 pages;
- No. NMI-13200254-01 revision 1 dated 10 October 2013 that includes 51 pages.