

# 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 single point Load Cell, with strain gauges, tested as a part of a weighing

instrument.

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

(ZEMIC)

Type : BM6G-xx-xx-xxx-xx Series

Characteristics  $E_{max}$  : 20 kg up to and including 500 kg

Accuracy class : C

In the description number TC8011 revision 0 further characteristics are described.

Description and The load cell is described in the description number TC8011 revision 0 and documentation documented in the documentation folder TC8011-1, appertaining to this

test certificate.

Remarks Summary of the test involved: see Appendix number TC8011 revision 0.

Issuing Authority NMi Certin B.V. Notified Body number 0122 24 October 2011

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
BM6G Load Cells Catalogue for using	8011/0-01	0	Mechanical/ Electrical 6 pages

#### Cable:

For the BM6G 20 kg up to and including 100 kg only 6 wire system is allowed.

For the BM6G 150 kg up to and including 500 kg a 4 or a 6 wire system is allowed.

- 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 BM6G 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		BM6G-xx-xxx-xxx Series	
Humidity classification		СН	
Fraction p <sub>lc</sub>		0,7	
Temperature range		-10 °C / +40 °C	
Maximum capacity	Emax	20 kg up to and including 500 kg	
Accuracy class		С	
Maximum number of load cell verification intervals	n <sub>max</sub>	5000	
Ratio of minimum LC verification interval	Y = E <sub>max</sub> / v <sub>min</sub>	20000	
Ratio of minimum dead load output return	<b>Z</b> = E <sub>max</sub> /2*DR	5000	

The characteristics for  $\mathbf{n}_{max}$  and  $\mathbf{Y}$  can be reduced separately.  $\mathbf{Z}$  is proportional or equal to  $\mathbf{n}_{max}$  Each produced load cell is supplied with information about its characteristics.



# Description

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Minimum dead load : 0 kg

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

Rated Output:  $2 \text{ mV/V} \pm 0.2 \text{ mV/V}$ Input impedance:  $380 \Omega \pm 15 \Omega$ Output impedance:  $350 \Omega \pm 3.5 \Omega$ 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:

- BM6G Load Cells Catalogue for using, drawing number 8011/00-01.

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: TC8011.

#### 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.	BM6G- C5-20 kg SE-3B6 BM6G- C5-150 kg -3B
Temperature effect on minimum dead load output (20, 40, -10 and 20 °C)	NMi Certin B.V.	BM6G- C5-20 kg SE-3B6 BM6G- C5-150 kg -3B
Creep (20, 40 and –10 °C)	NMi Certin B.V.	BM6G- C5-20 kg SE-3B6 BM6G- C5-150 kg -3B
Minimum dead load output return (20, 40 and –10 °C)	NMi Certin B.V.	BM6G- C5-20 kg SE-3B6 BM6G- C5-150 kg -3B
Barometric pressure effects at room temperature	NMi Certin B.V.	BM6G- C5-20 kg SE-3B6
Damp heat, cyclic: marked CH (or not marked)	NMi Certin B.V.	BM6G- C5-20 kg SE-3B6 BM6G- C5-150 kg -3B